DAILY LIFE

ORIGIN OF THE TASMANIANS.

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PREFACE.

In presenting the companion volume of "The Last of the Tasmanians," the Author expresses his satisfaction at the reception of his first work, and his hope that the second may meet with similar favour.

In the publication of material accumulated through a course of many years, his motive has been neither the desire of gain nor the hope of praise. He sought to do honour and service to the Colonies he admires, and to interest Englishmen in the lands where their brethren dwell.

Conscious of the imperfections of his undertaking, it has been his honest effort to bring together the most reliable information about the Lost Race of Tasmania, that men of science in future days may have some record of the tribes now gone from the earth. The subject of aboriginal peoples has but recently engaged the thoughts of students, and its valuable aid is hardly yet recognised by the historian.

At the suggestion of a leading English geologist, the sketch of Tasmanian geology has been added. It was thought that the

scientific reader of the "Origin of the Tasmanians" might like a further acquaintance with their rocky home.

The labours of Dr. Milligan and Mr. Logan will be appreciated, and the contribution of Dr. Topinhard acknowledged with pleasure.

Favoured by the approval of the public, other stories of Old Colonial Days may appear, especially those relating to the progress of Religion and Freedom

JAMES BONWICK.

ACTON, LONDON, *January* 9, 1870.

THE

DAILY LIFE OF THE TASMANIANS.

INTRODUCTION

THE departed race once lived and laughed in the world. There was a time when no thought of the Whites disturbed the rude joys of the Island Barbarians. They lived as others had done before them; ate the same food built the same huts, wore the same ornaments, sang the same songs, trembled at the same fears, fought with the same weapons, and were buried or burnt by the tribe when dead. They knew no past, they wanted no future.

But they lived no more independent of society than we live. Their characters were similarly moulded by parental training and the sentiment of their age. Their opinions were governed, as with ourselves, by the circumstances of their birth and the wisdom of their ancestors. As savages, they were content to be obedient to the rule of the elders, and would have been very scandalized at our "Girl of the Period" claiming the supremacy of her own sex. They were true Conservatives, and not only condemned innovation, but crushed it.

The monotony of their lives may not have been greater than ours. Their freedom of movement in the Bush gave them an advantage over the grooves of our modern civilization. The

absence of many comforts was compensated by their ignorance of them. After all, it may be even doubted if the Tasmanian Aborigines did not eat better, sleep better, and laugh more than the majority of our favoured and enlightened Europeans.

To tell what they ate and how they built—what they sang and how they danced—what they thought and how they married—what were their ills and how they were buried—is the object of the present work.

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THE FOUNDING OF THE COLONY.

As so much misapprehension exists about the establishment of the Settlement of Van Diemen's Land, now Tasmania, the publication of documentary evidence, obtained in the colonies of Australia, may be regarded as useful. As the original documents have been examined by the author, he is able to vouch for the accuracy of the copy.

It has been generally thought that Colonel Collins established the colony, when he left the shores of Port Phillip, early in 1804. The *Muster Roll* of the Sydney barracks, which gave the news of the day before the Press saw the light in Australia, had the following interesting Government Order, on March 29, 1803:—

"It being expedient to establish His Majesty's right to Van Diemen's Land, His Excellency has been pleased to direct Lieutenant John Bowen, of His Majesty's ship *Glatton*, to form a settlement on that island, and has appointed him Commandant and Superintendent of the settlement so formed, until His Majesty's pleasure is known. His Excellency has also been pleased to appoint Mr. Jacob Mountgarret, surgeon of His Majesty's ship *Glatton*, to act as surgeon, and Mr. Williams to act as storekeeper, at the above settlement, until His Majesty's pleasure is received thereon."

The explanation of this act is connected with the French Exploring Expedition, under Commodore Baudin. The year before, the French had been much delighted with the little island, and evidently contemplated a settlement there. As the English at this time maintained a deadly struggle with Buonaparte for national life, the Governor of New South Wales acted discreetly in securing the country.

A Proclamation of May 18, 1803, affords additional evidence. A man of the name of Hayes, then not out of bonds, had been so imprudent as to attempt the establishment of a Masonic Lodge, and that.

after some warning from the authorities. The condemnation of this hasty but well-meaning *Brother* is stated thus:—"To hard labour at the new settlement to be formed at Van Dieman's Land."

In a record of June 3, 1803, an account is given of the departure from Fort Jackson of some of the New South Wales Corps and a few prisoners, in the *Lady Nelson*, under the command of Lieut. Bowen, R.N. The reason is therein stated to have been because of the French being expected to take possession of the island. The *Sydney Gazette* of August 28, 1803, notices another trip: "Sailed His Majesty's armed tender, *Lady Nelson*, for the river Derwent, in Van Dieman's Land."

More intelligence is subsequently given. On Oct. 13, 1803, it is announced that the *Lady Nelson* had returned to Port Jackson. "The accounts from thence," it is added, "speak highly of the great land advantages of that settlement, which the Commandant has named HOBART."

It was so named after Lord Hobart, then Secretary of State for the Colonies, and that by Governor King at Sydney, and not by Lieut.-Governor Collins. On Oct. 21st, it is written: "People embarked for the settlement at Hobart in Van Dieman's Land." In describing the sailing of the *Dart* brig, with six soldiers and thirty prisoners, the information is afforded that they go "under a promise that, if their conduct merited the approbation of the Commandant, they would be allowed to return here (Sydney) at the end of two years, or to be allowed to settle at the place."

On the 27th of Sept. 1803, Lieut. Bowen addressed His Excellency respecting the site of the infant colony:—

"About six miles from Risdon Cove, the banks on each side rise very steep, sometimes rocky, but thickly wooded. A surveyor would find much employment in the Derwent, the flats being so broad above Herdsman's Cove as to make the passage difficult for boats. Opposite Risdon Cove is a fine inlet and deep water, the largest I have seen in the Derwent, and but little noticed in the chart. Ralph's Bay, Mr. Curtoy informed me, is very inaccurately laid down, and is very shoal, the *Lady Nelson* grounded a good distance from the shore; and also informed me that the flax plant grows there, some of which he showed me, though I have not seen or heard of any about the settlement."

The French were annoyed at being so outwitted by the New South Wales Government. Péron, the historian of their expedition, complained bitterly of the arrogance of perfidious Albion, in claiming as the extent of their new territory in the south all land between the latitude 10° 37′ to 43° 39′; "that is," said he, "everything between those parallels up to the coast of Peru and Chili."

Governor King was very prompt in his zeal for his country's welfare. He despatched Mr. Surveyor Grimes in search of the French in 1802. This officer succeeded in finding them on King's Island. Having told them that His Excellency had heard of their intention to establish a colony in Van Diemen's Land, he warned them that from 10° 37′ to 43° 39′ S. the English claimed exclusive rights. They denied the impeachment. "Well," said the Englishman, "I am commanded to oppose, by all means in my power, the execution of the project attributed to you." Then the captain of the *Cumberland* landed with some men, set up a tent under a large tree, and in the sight of the French fired off several guns, gave three hearty huzzahs, and renewed the declaration of possession.

We turn now to the part taken by the expedition under David Collins, Esq., Colonel of the Marines, and the first Governor in Van Diemen's Land.

The beautiful harbour of Port Phillip had received the praises of Captain Flinders, the celebrated navigator. The situation was geographically good, as it would form a place of call on the voyage to Port Jackson. The climate was thought better for Europeans than the hotter latitude of Sydney. The Home Government despatched a couple of vessels, the *Calcutta* and *Ocean*, under Colonel Collins, to found a penal colony there.

Such was the ignorance of the authorities, or so great their indifference to morals, that none but male prisoners were sent. There were 367 of these, under a guard of fifty-two military men. There were but twenty-four wives permitted to accompany the party.

They were landed on a barren, sandy point of land, a little inside of Port Phillip heads. It was an unfortunate selection of site, as it is to this day unoccupied. The climate was all that could be desired, but the soil was found to be deficient in fertility, and the place badly supplied with water. Some exploration was made to find a better locality. A survey of the coast in the bay gave no great promises, and the land expedition was toward the inhospitable country of Western Port. Had almost any other portion of the country been examined, or had the valley of the Yarra Yarra been seen, Victoria would have been colonized in 1803, instead of 1835.

Colonel Collins and his officials were disgusted with the country, and he represented his opinions in a despatch to the Chief at Sydney. His thoughts and wishes were directed to Van Diemen's Land, but he wrote for instructions.

The conduct of Governor Collins has been called in question. It was thought some personal motive had disposed him to leave the shores of Port Phillip for those of Van Diemen's Land. The selection of the locality, and the transference of the settlement, were determined

by Governor King, in Sydney. To the complaints of Colonel Collins, and his desire for instructions, the following letter was sent in reply. The Governor's letter to Port Phillip is dated from Port Jackson, November 26, 1803.

"It appears," said he, "as well by Mr. Grimes' and Mr. Robbins's survey, as by your own report, that Port Phillip is totally unfit in every point of view." After some remarks, he thus proceeds :—

"You will also observe the reasons that determined me in fixing a settlement at the Derwent, on Van Diemen's Land; also, the Commandant's communications from thence, and my correspondence with him. The circumstances you will consider as a guide to your judgment in going to that settlement, or whether you consider Port Dalrymple more eligible. The advantage of the river Derwent is the situation for ships to touch at, on their way to China or this place; the favourable report of the soil by Bass and Flinders, and its being confirmed by Mr. Bowen in the short time he has been there, together with the facility of ships having access to it, is a great recommendation. Although not so advantageously situated as Port Dalrymple, yet its capability in affording protection to the sealers, and those who go in quest of oil, is an object of great consideration, with the advantage of having a settlement already commenced and stocked, although on a very small scale."

Here the question was practically settled by Captain King. The superior claims of the Derwent, the future site of Hobart Town, are substantiated. Port Dalrymple, at the mouth of the Tamar, on the northern side of the island, already presented advantages for a settlement, and was very shortly after provided with a small party. But the southern port is shown to be better.

Mr. Collins replied to this letter on the 16th of December. Two months had passed since he had landed at Port Phillip, and he had employed more of that time in considering the prospect of other places, and sending persons to the other ports for observation, than he had devoted to any thought or examination of the country where he had first located himself. A favourable report of Port Dalrymple had just been brought in by one of his boat-parties, and the answer to Sydney showed the influence of the new tale.

"I have seriously considered," said Colonel Collins, "the advantages and disadvantages of the two harbours stated in your despatch No. 1, and have attentively perused the enclosures contained therein. As your Excellency's opinion seems to point to my fixing at Port Dalrymple, (?) I shall (if its local advantages are found to be such as will warrant my proceeding thither) not hesitate in giving that harbour preference; although I must acknowledge that the circumstance of a settlement having been commenced at the Derwent is a strong induce-

ment for my establishing myself there. Should that eventually be the case, I shall deliver the letter which you have sent to me for the Commandant at that port."

For the sight of this interesting letter, and for other literary favours, the author is indebted to the kindness of Mr. Justin Brown, of Hobart Town, and son of the venerable Chaplain of Launceston.

Mr. Collins decided upon the Derwent. He sent off a hundred convicts in the *Ocean* on the 24th of January, 1804; and he left Port Phillip the day after in the *Lady Nelson*. The Governor soon arrived at his destination, but the *Ocean* was twenty-six days on a passage now made in two days. That vessel was very unfortunate on her next trip. The *Sydney Gazette* of August 24, 1804, noting the return of the *Ocean* to Port Jackson, bringing Lieutenant Bowen from the Derwent, spoke of thirty-two acres being already in crop, and adds, "which would have been doubled if circumstances had allowed of the whole of Lieutenant-Governor Collins' establishment being landed from Port Phillip. The *Ocean* arrived at Sullivan's Cove (Hobart Town), from her second voyage to Port Phillip, on the 25th of June, after a most tempestuous voyage of thirty-two days, which unfortunately deprived that infant settlement of most part of the small stock that ship was carrying."

When Governor Collins entered the Derwent, he proceeded to the settlement already formed at Risdon by Lieutenant Bowen; but disapproving of the site, he removed the whole establishment to Sullivan's Cove, under the shadow of Mount Wellington, and carried thence the name of HOBART, which had been given to the first locality. The *Gazette* of March 18, 1804, thus notices the change:—

"Lieut.-Governor Collins, not approving of the situation at Risdon Cove, had fixed his colony at a small bay about six miles lower down, on the opposite side of the river, which has since been named Sullivan's Cove. The place possesses many superior advantages to the situation Mr. Bowen fixed on."

That same month gave the Sydney inhabitants further news of the new settlement and the employment of the officials.

"The civil officers of Lieut.-Governor Collins' establishment," said the Press, "and some other trusty persons, have formed themselves into an association for the purpose of preventing the depredations of that class who have already shown a propensity to resist the rights of MINE and THINE. This measure is very commendable in those gentlemen, considering the smallness of the Lieut.-Governor's military establishment. Some good houses are erected at Hobart; and potatoes and vegetables grow very well."

In spite of the thievish propensities of some among this settlement of convicts, Colonel Collins continued his development of the colony.

Occasional changes of the name of the place meet the reader of the early *Gazettes* of New South Wales. Sometimes it is *Sullivan's Cove*, then *Hobart*, again *Hobart Town*, and not unfrequently simply *the Derwent*. In August 1805 the printer has it "Hobart Town, Van Deman's Land."

But very shortly a rival settlement appeared, and one of such promise as to bid fair to eclipse the other on the Derwent. This was Port Dalrymple.

Lieutenant-Colonel Paterson, of the New South Wales Corps, and subsequently Acting Governor at Sydney during the so-called Rebellion, was ordered there. A General Order of September 14 relates to the sailing of the *Lady Nelson*, "to fix the intended settlement at Port Dalrymple;" Colonel Paterson is said to be appointed to administer the government thereof. No one was to go there without an order from the Governor. Possession was formally taken on October 10, and the debarkation took place on the 14th. He established himself there with sixty-six soldiers and a few convicts.

The *Gazette* of January 6, 1805, describes the location as "at the head of Western Arm, between two streams of fresh water, named Kent's and M'Millan's Burns. It is intended to name the settlement York Town, and a commanding hill near it Mount Albany. A male child, born soon after the establishment landed, was christened *Dalrymple*." It is subsequently intimated that the settlement was removed from the Outer Cove to the Western Arm, twelve miles from the cascade. On March 10, 1805, we read of "the principal settlement, which Lieut.-Governor Paterson has named *Yorkton*."

Two Lieutenant-Governors were in authority at the same time; one on the north side of the island, and one on the south. One was usually known as the Governor of Port Dalrymple, and the other as Governor at the Derwent. Although the country between was wholly unvisited, and not very tempting to the early settlers, it was necessary for Governor King to define the territories of his two Van Diemen's Land Lieutenants.

The southern portion of the island, below the latitude 42° S., was denominated the County of Buckinghamshire, and declared to be "where the seat of Lieut.-Governor Collins' government is placed." The Proclamation then sets forth,—"And that the part of Van Dieman's Land on the north side of the said parallel (42°), in which Port Dalrymple, the seat of Lieut.-Colonel Paterson's government, lies, be distinguished and known by the name of the County of Cornwall. Each of those officers are to exercise the duties of their respective jurisdiction in the said counties of Buckinghamshire and Cornwall, subordinate to His Majesty's Captain-General and Governor-in-Chief of this territory."

There were, then, two distinct colonies in the island. The boundary was about the site of Campbelltown.

Port Dalrymple greatly prospered at first. It was nearer than Hobart Town to Sydney, and the early Sydney press had its news of the island from that port. But in May 1806 the intelligence was conveyed that "Lieut.-Governor Paterson moved the greater part of his establishment from Western Arm to the country above the cataract, where the land extends on both sides the rivers North and South Esk." This eventually grew to be the town of Launceston. But it struggled for several years against the petted places nearer the mouth of the Tamar.

After a variety of changes from Inner to Outer Cove, and even, for a little time, to Colonel Paterson's Launceston, Governor Macquarie came across to examine the county, and decide permanently upon the northern capital. After some explorations, he fixed upon the Outer Cove, or York Cove. It was described as "an enchanting situation," and compared to Mount Edgecombe, Devonshire. The Governor-in-Chief called the seat of government *George Town*, after His Majesty. The official announcement of December 8, 1811, said it was resolved to move "the chief settlement of Port Dalrymple to a situation which can afford His Majesty's ships and trading-vessels a ready and easy place of refreshment on their passage through the Straits."

It must be understood that, though specifically Port Dalrymple was the entrance to the Tamar River, the word was employed to mean the northern settlements of the island.

The inconvenience of this division of Van Diemen's Land into two independent countries, as well as counties, was felt as soon as persons began crossing the island and occupying land in the interior. Representations of this disturbance of official order were sent home. Subsequently, General Macquarie issued this Proclamation, May 25th, 1812:—

"His Excellency the Governor has recently received instructions from His Majesty's Ministers, to make the necessary arrangements for placing the settlement of Port Dalrymple as a dependency on that of Hobart Town, on the river Derwent, in Van Diemen's Land, that the officers commanding at the former settlement should be subject to the orders, superintendence, and general control of the Commandant of Hobart Town."

Here we learn that both Lieutenant-Governors in the island were regarded as simple *Commandants* by His Excellency. The Commandant of the north was to be subject to the southern ruler after June 30, 1812.

Some years after, a great effort was made to have Launceston established as the seat of government in the north. For a while it

succeeded. But the *Hobart Town Gazette and Southern Reporter* for 1819 exhibits another turn of the tide. The quotation runs:—"The Commandant of Port Dalrymple having reported to the Lieut.-Governor the removal of his quarters and residence to George Town, at which place the seat of the establishment of that settlement is now and henceforth forward fixed, under the instructions and commands of His Excellency the Governor-in-Chief."

But nothing could resist the logic of events. Around Launceston lay a smiling country of orchards and corn-fields, and near George Town was a sandy waste, or a rocky scrub. Governor Arthur established the supremacy of the former. In February 1824 the paper reported that Launceston was *to be* the capital of Port Dalrymple, instead of George Town. Since then, the very name of Port Dalrymple has become well-nigh forgotten; and thriving, public-spirited Launceston is the northern capital.

The very name of the colony itself has changed, after a long struggle. When Tasman discovered the island in 1642, he called it after his Dutch friend, Van Diemen. But from very early times the more euphonious "Tasmania" was suggested in preference. The Australasian Pocket Almanack for 1825 calls the country "Van Diemen's Land, or Tasmania;" and a Sydney Almanack for 1829 speaks of a "succession of Lieutenant-Governors in Tasmania." Again and again have the island colonists used the soft word. But it was not until the gold diggings of Australia in 1852 had broken up the system of transporting convicts thither, that the Home Government were pleased to order that the island thenceforth be known no longer as *Van Diemen's Land*, but as TASMANIA.

And now, purified from its old associations with crime, inhabited by a people conspicuous for their worthy qualities, enriched with fertile soil, blessed with charming landscapes, and smiling beneath fair skies and the glances of the fairest of earth's daughters, Tasmania rises from her past humiliation, and tempts the wanderer with the choicest of all gifts,—*a happy Home.*

THE END.

R. CLAY, SONS, AND TAYLOR, PRINTERS, BREAD STREET HILL.

THE LAST OF THE TASMANIANS.

OPINIONS OF THE PRESS.

"It is impossible to conceive of a more mournful and depressing story. . . . It is the story of a race not only subjugated, but demoralized—not only demoralized, but extinguished."—*Daily News.*

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CHAPTER I.

INTELLECT OF THE TASMANIANS.

In comparing the intellect of one people with another, it is necessary to bear in mind the adaptation of mind to the circumstances of life. The city lady, who, though versed in language and skilled in the accomplishments of society, knew nothing of the growth of wheat, might be a subject of merriment to country clowns and rosy milkmaids. The philosopher, who, knowing the circle of the sciences, could not divine how the apple got inside of the dumpling, might be an object of derision in the kitchen. So, while we, with our school-lore, laughed at the ignorant savage—with our tools, mocked his clumsy contrivances—with our arts, despised his raft, his hut, his dress—he, on the other side, was amused at our ignorance of woodcraft, sneered at our deficiency of sight and hearing, and pitied our inability to gain a forest livelihood. He knew the natural history of his land, and could name both trees and animals, as few Englishmen could do of their own flora and fauna. He was acquainted with many secrets of forest life. If he read not in our books, he traced the characters of the natural world, and knew his lesson well.

It is absurd to call the Tasmanian Aborigine an upright-walking monkey, a talking brute. As may be seen in the chapter on "Language," he spoke at least a sensible tongue, with a construction full of grammatical beauties and methodical inflections; but he was deficient in the organ of Number. Still, there have been persons, otherwise learned and refined, who have had a similar infirmity. The English are a calculating people, and have been diligently instructed in the art of figures for many generations, and yet we have not a few who confess to a want of the reckoning art. The Tasmanians had no monetary transactions to develop the faculty, and their vocabulary was

deficient in the expression of numerals. In the previous work the Examination on their Flinders Isle of exile proved their lack of mathematical skill. The same has been remarked with the Australians. In the *Aborigines' Friend* is an account of an interesting youth brought from Adelaide by Mr. (afterwards Governor) Eyre. The particular mental weaknesses of both native peoples are herein described: "Whilst he carefully observed many things, and had an excellent memory for persons, places, and things, as well as for historical facts, he had great difficulty in understanding the grammatical construction of sentences, and more particularly everything relative to numbers, and even greater difficulty in retaining that which he had seemed to master in respect to these subjects." It should, however, be borne in mind that, with all our boasting over the savage, the English are indebted to the ancient Egyptian and Roman for their figures.

When I saw the aboriginal boys and girls in the Orphan School near Hobart Town, I inquired of their teacher in what respect they differed from the children of the convicts among whom they were thrown. All of the white race were very inferior in point of *physique* and intellect to others of their age and colour, of different parentage. They were, however, superior to the dark children in facility of learning arithmetic and grammar, though not so in geography, history, and writing. Two of the coloured lads readily and cheerfully answered my questions in geography, and indicated places on the map with great correctness. They were not kindly treated amidst the many rough boys and girls of the large establishment of Hobart Town, and seemed depressed, troubled, and sickly. Death rapidly delivered them from their sorrows at the school.

The imitative faculty of the Aborigines was well developed. A friend told me that on Flinders they would make merry at the expense of our national peculiarities, and successfully mimicked colonial performances in the Black War *Line*. Though *tune* was rather defective, *time* was excellent; *comparison* exceeded *causality;* and *ideality* was less than *humour*. All the perceptive organs came out strongly. Their illogical minds prevented their understanding or appreciating the doctrinal teachings of their religious instructors.

While Captain Freycinet in 1815 thought them reduced to

the "last degree of misery and brutishness," others took a more hopeful view. In the *Hobart Town Gazette* of April 8th, 1825, there is this opinion: "We boldly venture, without fear of encountering a refutation, to describe them as comprising a very superior mental grade, and as calculated to prove either an eminent blessing or a fatal scourge to their fairer complexioned fellow-creatures." Messrs. Backhouse and Walker state that they "have retentive memories, affording many sufficient proofs that they are far from being deficient in intellect." The Rev. John West said: "They appeared stupid, when addressed on subjects which had no relation to their mode of life; but they were quick and cunning in their own sphere." Dr. Ross has this testimony: "During all the intercourse I have had with this interesting people, I not only found no want of sense or judgment among them, but, on the contrary, much to admire in them as thinking men, as indued not only with much ingenuity and penetration, but with the tenderest sympathies of the heart, and all the nobler passions that elevate men in the scale of being."

The benevolent Mr. Backhouse draws no improper comparison when saying: "It would not be more erroneous for one of these people to look upon an Englishwoman as defective in capacity, because she could neither dive into the deep and bring up any fish, nor ascend the lofty gum-trees to catch opossums for her family, than it would be for an Englishwoman to look upon the Tasmanian as defective in capacity, because she could neither sew, nor read, nor perform the duties of domestic life. Were the two to change stations, it is not too much to assume that the untutored native of the woods would much sooner learn to obtain her food, by acquiring the arts of civilization, than the woman from civilized society would by acquiring the arts belonging to savage life."

While Mr. Latham has such mean opinion of the race as to intimate that their intellect was "too sluggish for the evolution of a superstition," Major Mitchell the explorer said of his black guides: "In most of our difficulties by flood and field, the intelligence and skill of our sable friends made the white fellows appear rather stupid." The Rev. Mr. Ridley declares that their barbarian languages "indicate an accuracy of thought, and a force of expression, surpassing all that is commonly supposed to be

obtainable by a savage race." The Hon. H. Keppel vindicates the dark race in the following truthful words: "It has been the fashion with naturalists, and writers who copy their matter from their predecessors, without the trouble either to inquire into the subject or to judge for themselves by actual examination, to place the Australian very low indeed in the scale of creation. A greater mistake than this has never been made. His intelligence is manifested both in the daily concerns of life and in the acquisition of languages." The Rev. G. Mackie, a much-esteemed Australian minister, ventures to say: "There is nothing a white man can do but a black man may be trained to do, if the right way be taken."

In judging of their mental powers, it is not fair to contrast them with the educated Englishman of to-day. It is true what Mr. Sohier says of their skull: "The sides of the forehead offer the greatest possible contrast with the Grecian, or artistic head;" and it is equally true that the descendants of Pericles' countrymen, with all their noble type of head, are now most notorious for blind bigotry, superstitious ignorance, and cruel brigandage. The Tasmanian was very ignorant of numbers, and yet our very word *calculate* is derived from stones used for reckoning like savages, and wooden tallies for government receipts were in use here till the reign of George IV. As a reproof to the self-complacency of Britons, Cicero's letter to Atticus may be cited: "Do not obtain your slaves from Britain," wrote he, "because they are so *stupid*, and utterly *incapable of being taught*, that they are not fit to form a part of the household of Athens."

Professor Waitz once said, "A large consumption of indigestible aliments gives so much work to the digestive organs as to interfere with the development of the intellectual faculties." Another thought an animal diet quite essential to healthy mental action. With capital digestion, and plenty of game, our Aborigines ought, therefore, to have been wise.

After all, the fact of one man, Walter George Arthur, having received a tolerable education, and having exhibited an intelligence equal to most English peasants, is a proof that the race was not so hopeless as some thought. The chapter on "Civilization of the Tasmanians," in the other work on the "Last of the Tasmanians," may be referred to for further particulars of the mental qualities of the people.

CHAPTER II.

CHARACTER.

VARIOUS opinions have been maintained as to the character of the Tasmanians. Indiscriminate slaughter, abominable treachery, unmitigated cruelty, and unbridled licentiousness, have been charged upon them. Shy and distant they ever were. Suspicious of the sincerity of our professions, they never relied upon our friendship, nor sought our society. Conscious of no similarity of views and no sympathy of interests,—constrained to feel their inferiority in warlike appliances and their deficiency in artistic skill,—impelled, too, by a brooding sense of our unjust invasion of their soil, they never exhibited their most amiable feelings toward us, but felt thwarted, humiliated, and despised in our presence. Yet they who knew them best trusted them most.

They were far from being a bloodthirsty race. It was not necessary for them to establish their claim to manhood by the sacrifice of life, or to be deemed unfit to court a maid until they had killed a man. Mr. Conger, a United States agent for the Sioux, reports that "an Indian never becomes a man, according to their laws and usages, until he has struck an enemy, which means, has taken a life." The Tasmanians were more humane. In their very wars they took no scalps; they injured no women; they tortured no prisoners, but readily made friends after a short conflict, kindly tended the wounded, and fraternized over a corrobory.

The voyagers who examined them with curiosity, and surveyed them with interest, were not indifferent to their good qualities, as may be seen in the previous volume. The Frenchman could say: "Our kind Diemenese left us not for an instant, and, when we pushed off from shore, their sorrow was manifested in the most affecting manner." And yet he saw reason to complain of

more roughness than was agreeable. Labillardière declared they were mild and affable.

The Rev. T. Dove, some time catechist on Flinders Island, has published his views of them. His opinion is that they "have been usually regarded as exhibiting the human character in its lowest stage of degradation. And if our notice be directed only to the meagre sense of accountability which prevailed among them, or rather to the absence of all moral views and impressions by which they were distinguished, this estimate is undoubtedly correct. Every idea bearing on our origin and destination as rational beings, seems to have been erased from their breasts." Tried by that gentleman's Westminster Catechism, they were sad enough. But compared with other men, as the clergyman found in this world at large, they were not so very fallen, for he adds: "Their social history was rather characterised by the absence of what is venerable and lovely, than by the prevalence of what is dark and revolting. Harmony and good humour seem generally to have reigned among the members of the same tribe." In short, had he tested them with the Mexicans, the modern Greeks, the wynds of Glasgow, the Seven Dials of London, or the Rocks of Sydney, he might have discovered something to their advantage.

The French author L. F. A. Maury, writing of the Papuan people of the East, has this observation: "Those who live independent are of a vindictive and perfidious nature: they in general avoid strangers, or feign for them sentiments of friendship, that they may attack them afterwards in the end without warning. Thus they carry an implacable hatred to whoever attempts to establish himself upon their territory; a hatred which endures even to the last man of their tribe. One ought to attribute to this indomitable character the principal cause of their destruction." So would the Spaniards have written of the Guanchos of Canary, and so hoped the Turks to write of the bold mountaineers of Montenegro. The Normans were shocked at the vindictiveness of the Saxon bands in the marshes of Ely, the English at that of Wallace's followers, the French at that of the Spanish guerillas, the Russians at that of the Circassians. And yet history has been allowed to call such conduct patriotic nobility. A generous enemy, Governor Arthur, could venture to describe the Aborigines, in his despatch to the Colonial Office,

"a simple, but warlike, and, as it now appears, noble-minded race;" for, when crushed and nearly annihilated, their heroic qualities were recognised.

Messrs. Backhouse and Walker, the Quaker missionaries, had these commendations to give: "They deserve the character of a good-tempered race. There is nothing that can with propriety be termed immodest in their general deportment. The scrupulous care they evince not to take anything which does not belong to them entitles them to the character of honesty." No wonder they say: "We took leave of them under feelings of much interest, excited by their kind, affectionate, and cheerful dispositions." Mr. Backhouse elsewhere records an illustration of their delicacy of sentiment, when noticing some women, dressed in frocks of Wallaby skins, and living with sealers, to whom they had addressed some words of kindness. "One of them," he writes, "presented necklaces of shells to my companion and myself. These she dropped into our hands as we passed, appearing to wish to avoid receiving any acknowledgment."

Dr. Jeanneret, once Superintendent on Flinders Island, in a letter to me, hits off one of their weaknesses thus: "My Aborigines are happy and healthy, but so frail in purpose that the most ordinary temptation suffices to throw them off the balance, and few could be depended upon not to resort to that natural law of revenge were they again ill-treated without redress." Such instability some may attribute to the unfortunate depression of their nose, which was sadly wanting in the Roman type of inflexible prominence. Mr. Clark, the enthusiastic catechist and friend of the race for nearly twenty years, when telling me of his affection for them—a feeling thoroughly reciprocated—assured me that "they were kind, good-natured, and mild."

A story of kindness is told. Two men, who were engaged blood-hunting after the Natives, were attempting to cross a flooded stream upon a rude raft they had constructed. Whirling along in the eddying waters, however, their lives were in extreme peril, when two native women saw their position, and with true feminine nature hastened to their succour. They swam off to the current-tossed vessel, and made signs for the Englishmen to get on their backs, and they would convey them

to shore. But, knowing their own cruel errand, they drove off the women, and soon after the raft was dashed against the rocks, and the men perished.

They had few crimes against each other. Faults not immediately punished were usually overlooked. Injuries were soon forgotten. The camp was commonly a scene of affectionate regard. The parental relation was seen in pleasing exercise. Many bore testimony to their love of children. The conjugal attachment had not the romantic character of civilized times, but was not wanting in real kindness. As in almost all countries, they considered the woman to be inferior to the man, and treated her accordingly. The father and son ate of the meal prepared by mother and daughter, and then left the fragments for their repast. But the "Life of Felix Neff" shows that a similar barbarism existed at the beginning of this century in the French Alps, where polished people, while feasting at the board, would occasionally pass a half-gnawed bone over their shoulder to the wife or sister behind.

Their friendship was limited by no distance of time, nor arrested by death. Their grief was sincere and expressive. In sickness they tended with affectionate solicitude, and at bereavement cherished the memory of the absent by ever-present memorials of their being. A bone suspended in a bag from the neck, as it hung against the breast, reminded the wearer of a former love. So many skulls and limb bones were taken by the poor Natives when they were exiled to the Straits, that Captain Bateman told me, that when he had forty with him in his vessel, they had quite a bushel of old bones among them. Manalagana, who was out with Mr. Robinson, was never once known to speak harshly to Taulebouey er, his wife. He had the jawbone of a friend covered over with native string, and hung upon his chest.

> "Undressed hair and dark complexion,
> Cannot forfeit Nature's claims;
> Skins may differ, but affection
> Dwells in White and Black the same.

When Mungo, the Black guide, in 1830, came with the English Roving Party suddenly upon the spot where a massacre of his people had taken place, he became much affected. But when some of the rough Bushmen began kicking the bones

about, the poor fellow was seized with a shivering fit from the intensity of his emotion. For days he refused food, and appeared wholly given up to melancholy. He was at length forwarded on to Oatland in an exhausted state.

In the strength of their emotions, they presented a contrast to the negro. The latter is boisterous in mirth, vehement in grief, but rapidly recovering from a heart affection. The Tasmanian, on the contrary, retained the depth of his feeling, and dwelt upon his sorrow. There are several well-known instances of friends refusing food and dying of regret for a lost one.

The modesty of their behaviour is well attested. Though naked, the women sat so as to preserve a decency of attitude. Young men and lads moved early from camp in the morning so as not to interfere with female movements at rising. Unmarried men never wandered in the Bush with women; if meeting a party of the other sex, native politeness enjoined that they turned and went another way. It has been said that, unlike the abandoned women of our own people, the native females observed the delicate rules of propriety even in their worst stage of social degradation. Marriageable girls were regarded with care, and the unmarried grown lads slept at fires removed from the families. The practice of the Australians, as described by Grey, was that said to have been the usage of the Tasmanians. "On no occasion," writes the traveller, "is a strange native allowed to approach the fire of the married."—"The young men and boys of ten years of age and upwards are obliged to sleep in their own portion of the encampment, where they themselves, or more generally some of their mothers, build for them two or three huts, in which those related within certain degrees of consanguinity sleep together."

As a race they were far from being so licentious as some; in this respect being like other Papuans, whose virtue shines in contrast with their brown Polynesian neighbours. It was absurd for passing travellers to describe character. Dampier, who only glanced at the Australians, wrote about their promiscuous intercourse. It is amusing to find in "Smellie's Philosophy" a statement of such indiscriminate connexion alongside of another declaring that the men wear no beards! They who have lived with the Tasmanians in the Bush speak with respect of their purity in the olden times before contamination with the Whites,

and the sacrifice of virtue for a morsel of bread. Of them might be said what James Davis related of the Queensland natives, among whom he lived for fifteen years: "I never heard of such a thing as unnatural crime among them." Again, he said: "They are so particular that they won't allow the daughter to sleep at the same fire as the son when they have arrived at the age of puberty."

Let this fact be remembered also, that, when they suffered so much themselves from the wrongs of their females, they were never known to retaliate in abuse of our countrywomen in lonely huts, though at the time of open warfare between the rival races, and when murder was not uncommon.

Dr. Georges Pouchet, of Paris, has this calumny respecting our southern people: "If the English police did not watch very strictly, they would set at defiance every day, at least, in the towns of their colonies, all the laws of public decency without any more thought than the monkeys in a menagerie." This is a cruel injustice; for, in relation to the offices of nature, they are scrupulously delicate and attentive to the Mosaical injunction on that head. Captain Stokes does the Australians the justice to say that their rude drawings on rocks and in caves exhibit not "the slightest trace of indecency." Can as much be said for boorish artists in Europe? Dr. Milligan tell us that his Tasmanians "were a people of few words, but of rapid and correct instincts." Mr. Clark, catechist of Flinders Island, spoke to me of their observance of cleanliness in such private duties, and their decency in the conjugal relation.

Even as regards the very crimes of the savage Tasmanians, Sir George Grey declared at the last British Association, that from his house to the rear of Buckingham Palace, London, he had recently witnessed more vicious and disgusting sights, and had heard more immoral language, than he had seen and heard in his many years' sojourn with savages. It therefore ill becomes Messrs. Lesson and Garnot to speak of our southern race having "a sort of moral brutishness, a kind of highly developed instinct, for discovering the good, which is always difficult for them to obtain, seems among them to have taken the place of most of the moral faculties of man." Dr. Milligan, while speaking of the "mildness of their character," has a story of one smiling at the remembrance of the way in which he had

speared another Tasmanian many years before. Some such pleasant memories have graced the barrack-room of more civilized nations; and some inventors of most destructive warlike appliances have been "mild in their character."

The Tasmanian was no creature of civilization; and, therefore, while wanting some of our elevation of morals, and while even guilty of crimes of violence, he had not acquired those refinements of commercial fraud and city vices which thrive with modern improvements.

CHAPTER III.

FOOD.

THE Aborigines were never in want of food; though Mrs. Somerville has ventured to say of them in her "Physical Geography" that they were "truly miserable in a country where the means of existence were so scanty." Dr. Jeanneret, once Protector, writes: "They must have been superabundantly supplied, and have required little exertion or industry to support themselves." Kangaroos, opossums, bandicoots, wombats, seals, stranded whales, birds, lizards, snakes, ants, grubs, and eggs, were in demand. Fresh-water fish were not used. Dr. Leichhardt once said of their Australian neighbours, "They seem to have tasted everything." Fatty matter was refused. When soup was placed before them, they have been seen skimming off the floating fat with their hands, and rubbing it upon their heads before proceeding to empty the dish. They do not appear to have had any fancy for those carnivorous nocturnals—the native tiger and the devil. The kangaroos were often encircled by the closing in of the hunters, when spear and waddy did their work. The Bush was sometimes fired, and the hunters stood in the openings to receive the fugitives. The remarkable absence of the dog places the hunters with the primitive chase-men of Europe. The opossum was seized from his hiding-place in the forest trees. It was often the office of the lubra to clamber after the soft furred creature. Provided with a rope, manufactured from a grass-tree, which she twisted round the trunk of the tree she sought to ascend, she notched holes in the bark for her great toe with the aid of a stone tomahawk. When seeking honey in the cavities of the tree, she was furnished with a grass basket, hanging from her neck.

The western tribes lived chiefly upon shell-fish, as the mussel and mutton-fish. The inland tribes made an annual visit to

the coast for this purpose. The women dived for the shell-fish, having baskets round their neck. Such meetings on the coast were joyous seasons; like those of the Bunya feasts in North Australia, and the *Pigface* festival of the west part of South Australia. Marine fish were speared in shallow water. Nets of string, made from the Corrijong, were also employed, though very inferior to the excellent nets made by the Australian natives.

As bird-nesting English boys spare the home of the robin, so did the Natives show a singular tenderness for a fish allied to the dog-fish, and called by them the *nurse*. Should one by any accident be brought up, it would be handled most tenderly, and returned to its native element, with the ejaculation of "Poor thing!" They had no such respect for the genuine dog-fish. The fish-hooks were of pointed bone or sharpened shell. Eggs of mutton-birds and swans were diligently sought for. Egg Island at the entrance of the Huon river and the east coast were favourite stations for swans' eggs. The eggs were roasted in the hot ashes.

In the account of an expedition to the South Cape by Messrs. Hobbs, Roberts, and Scott, in 1826, we have a reference to their fishing exploits: "The black natives," says the narrator, "frequently accompanied them, and always with the most friendly and obliging intentions. They assisted to carry the loads of the party hunted and brought them kangaroos, and the women were always ready to fish from the boats. They directed Mr. Scott to moor his boat over a bank of seaweed, where the water was about five or six fathoms deep, and plunging over the side, they dived to the bottom, and, after remaining from five to fifteen (!) minutes, ascended loaded with oysters or crawfish, and this they did so repeatedly as soon to fill the boat." Thirty years after this statement was written, I had the pleasure of intercourse with one of the party, Mr. Roberts of Bruni, but did not gather from him that he held so high an estimate of the diving powers of his dark friends as to believe they were quite a quarter of an hour at a time beneath the waters of the ocean.

There existed several sources of vegetable food. The native bread, the *Mylitta Australis*, a sort of truffle, was a mushroom substance found under ground, in rich soil, commonly at the

root of rotten trees, in various sized honeycombed masses. The skin was peeled off, and the inside roasted. The taste is not unlike boiled rice. When grated, with milk, it forms an agreeable dish to Europeans. Some pieces have weighed fifteen pounds. Lying beneath the surface, like truffle, no ordinary civilized eye could detect the spot where it is hidden. The white, insipid fungus Punk, of the Eucalypti, was roasted for food. An edible fungus grows in clusters round the swollen parts of the Tasmanian myrtle, from the size of a marble to that of a walnut; its taste has been compared to raw cow-heel. The tender base of the inner leaves of the Xanthorrhœa, or grass-tree, was often roasted.

Roots were sought for with the stick of the lubra; as those of the bulrush, the orchis, the native potato. The last-named, the Gastrodia, when cooked, has the flavour of beetroot. The Wattalapee or Pomalle was dug out of lagoons. The young shoots of the common fern were in requisition. Some seeds were crushed with stones. Roots were occasionally roasted, and then pounded to soften them. The delicate manna, dropping so abundantly in the season from the Eucalypti trees, has afforded Blacks and Whites many a delicious banquet. The pith of the Alsophila fern gave a good supply of food. The Natives would split open the top, and take thence the heart of the plant, which was sometimes the thickness of a man's arm, and roast it on the ashes; the taste somewhat resembled the Swedish turnip. The juice of the young common fern, *Pteris esculenta*, was agreeable. The native fruits are usually very astringent; as the grape of the Macquarie Harbour vine, the wax clusters of Mount Wellington, the Leucopogon, or native currant, &c. The Exocarpus, or native cherry, with its stone outside, is a pleasant repast for Whites or Blacks. The Mesembryanthemum, or pigface, bears a rather sickly sweet fruit, and grows plentifully upon sand-hummocks. When travelling in the Bush on a hot day, I have found the sucking of the dark red juicy seed-vessels of the pigface a welcome refreshment. The Tasmanians called it the *Canagong*.

The seeds of some acacias were roasted in their pods, as *Acacia sophora*, growing on the sandhills by the shore. The sassafras, the sorrel, the tea-tree, &c. were also articles of food. The *Solanum*, or colonial kangaroo apple, is even prized by

Europeans; the Natives put the apples in sand-heaps to ripen better with the heat. The small astringent apple-berry of the pretty purple climber Billardiera was a treat to the Natives. Even the leaf of a large kelp was fished up from the sea, macerated in fresh water, and roasted to a leathern consistence and flavour. The *Gazette* for 1826 contains a notice of a Christmas festival among the Blacks at Lake Arthur, when they regaled themselves upon the sap of a sort of Eucalypti, called the cider-tree. They had no tobacco, nor did they chew betel or any substitute. The Cooper's Creek natives chew the leaf of a plant as a quid. But Labillardière speaks of a lady devouring game from her own head. "We observed with disgust," said he, "that, like most of the Blacks, she crushed these filthy insects between her teeth and then swallowed them."

The manners of our Aborigines at the table were not more refined than those of some parts of Europe not many years ago, when the wives and sisters waited while the masculine lords partook of their meals. The Black would, however, occasionally pitch over a bone to his lubra, gin, or spouse, who squatted behind him, chanting in no musical key, "Yang, yang, yang." Like all savages, they were gross feeders. I heard of a woman on Flinders Island who ate one morning for breakfast, in addition to a double allowance of bread, above fifty mutton-bird eggs, which are as large as those of a duck.

The cooking was simple enough, and decidedly inferior to the fine ovens, with gravy-saving appliances, to be found in Australia. Unacquainted with the mystery of pots and kettles, they confined themselves to the roast. They were ignorant of the art of boiling, like the Australians, Bosjesmans, &c.; nor had they reached the transition state obtained by Laplanders, Indians, and Polynesians, of throwing heated stones into a vessel of water to boil meat. Occasionally they laid fish upon a hot stone. The shell-fish and eggs were thrown into the hot embers. The intestines of beasts were often cooked alone as a choice morsel, a portion being broken off by the fingers and presented to a friend as a love-token—the same as among the Bedouin Arabs still. The women selected the intestines of the roast swan; putting one end in the mouth, they continued masticating till all had disappeared.

Dr. Ross thus describes a feast, in 1823, near the river

Shannon :—"A tall fellow overtook us with a bunch of seven fat but strong-smelling opossums, slung on his back and round his neck. We followed him to the fire, and he very deliberately chucked them all upon it, one after the other, just as he had caught them. As soon as the opossums were singed and well heated on one side, our cook turned them on the other ; and then, dragging them by the leg from the fire, he scraped off the fur, and with a sharp flint cut out the inside, and again threw it on the fire, from which it was soon after taken and eaten, without the trouble of knife and fork, in a half-raw state. Occasionally they would take a short walk to the lagoon, and laying themselves on their breasts, and dipping their mouths into the water, drank without cups or chalice the pure element of nature." Péron had previously noticed that they never drank until after finishing eating. Sometimes the water was brought from a distance by the wives in close-plaited vessels.

Though not fastidious in their eating, they had their prejudices. Dr. Story told me that some of the tribes would never eat shell-fish. The South Australian Blacks, in the early days of the colony, seeing people gather the native currant, to send to town for preserves, predicted misfortune, saying, "Ah! plenty die Adelaide now." Alluding to the objection of some persons to fish, Labillardière directs attention to our Aborigines of the south: "We did not see a single person who had the least trace of any disease of the skin ; which by no means agrees with the opinion of those who maintain that the ichthyophagi are subject to a species of leprosy." The stinging ray, refused by many, was hunted for food by them. A strong party went into the water, and drove the fish inward to the shallows, striking at them with their spears.

A Sydney paper of June 1804 had this luminous account of the Van Diemen's Land natives: "As sportive Nature would seem to have designed the southern hemisphere for the display of phenomena in the animal creation, so also does the polity of these barbarous inhabitants oppose itself to every principle of rational government, and the propagation of the human species. Here it is discerned that unless the propagation of the species be limited by destruction and abominable customs, their natural indolence must in process of time have reduced them to the horrible necessity of existing as cannibals, as nature is wholly

unassisted, and increase of the herb and the animal alike neglected."

Ovens are occasionally fallen in with on the Tasmanian island, though common enough with the Australian Natives. Mr. G. A. Robinson saw one in the western part of Port Phillip, which was thirty yards across. Captain King declared the ovens of Rockingham Bay like those of Tahiti. Stones were laid at the bottom, the animal was placed thereon, hot stones were piled upon the flesh, and leaves, mats, and earth filled up the space. The gravy was now and then saved in a hollow piece of bark below. One on the Glenelg of North Australia was eight feet deep, paved and lined with flat stones, with an agreeable roast of turtle eggs. There are hundreds of them in Victoria, most being near water; eight large ones are near a lake on the plains. A fine one was measured, and ascertained to be seventy-nine yards round, and with a depth of five feet in the centre.

Such large mounds, though full of stones and ashes, and bearing evidences of being used for cooking ovens, have been thought to be ancient graves. Huge trees rising through them proclaim the age of the structure, and skeletons have more than once been discovered in the mound. Vast collections of mussel shells, with burnt clay, evidence the culinary origin of some at least. Not above twenty years ago, settlers have seen the Murray natives dig out ovens in these mounds.

The Tasmanians and Australians were, in their native state, remarkable exceptions to the general rule of smoking. No substitute for tobacco was used; a fact sufficient, with some authorities, to indicate their debasement. At Cape York, near New Guinea, an Australian tribe have lately been found to be smokers. The smoke from a strong herb is produced in a huge bowl, and passed onward through a hole into a bamboo tube. The intending victims approach, take an inspiration of smoke, and reel backward in semi-insensibility.

Unless for cooking purposes, their fires were always small, and just within the opening of their breakwind huts. The sticks were so disposed that the smoke ascended in a curling column. At night the company lay around, with their feet to the glowing ashes. A party would seldom be without their *firestick*, which was either of honeysuckle or grass-tree, and was carried, with the lighted end behind, usually by the females. In a very old

Hobart Town paper I read of the Southport natives using a spongy substance (punk) from the stringy bark. The piece was wrapped up tightly at one end, and would retain fire till all was burnt. By this means, says the writer, "the Natives are never without light." In Queensland a pine stick is carried alight.

The Rev. Mr. Dove says: "The author most expressly states that their memory supplies them with no instance of a period when they were obliged to draw upon their invention or ingenuity for the artificial production of a fresh flame; so that the American Indian practice of rubbing two pieces of wood together, and getting a fire through friction, is unknown. Hence the importance of a perpetual fire is so keenly felt, that it is never allowed to die utterly away. Neither does any migration take place without the females making it their especial duty to look to the firebrand, and to keep alive its fire. It is the females' duty, too, to carry it about." He adds: "The Tasmanians have generally been described as samples of the lowest forms of humanity, and that, perhaps, rightly. The details as to the trouble they take about keeping up a source of fire are important; inasmuch as the difficulty they have in doing so has led to the statement that they alone of all human populations were, when discovered, ignorant of it."

Against this opinion we have abundant evidence that they did know how to produce artificial flame. One process was described to me by an ancient ex-Bushranger, who had found it necessary, in former days, to court the society of the Blacks in preference to that of his thief-catching countrymen. My informant, who is now a creditable member of society, mentioned that the Natives got two pieces of grass-tree stem, the smaller one of which had a hole in it. Some soft down of the inner bark of trees, called bull's-wool, was mixed with powdered charcoal, and placed in the hole. Friction with the other stick ignited this mixture, and flame was the result.

The Fuegians, in 1520, were found doing the same thing. They rubbed a pointed stick on another, with the pith of a tree between the two. The Australians used the two sticks in the same way. But the Fuegians have advanced within the last three hundred years, for they now use a flinty stone, striking against a piece of iron pyrites, and catching the sparks on some dry moss.

On Bathurst Island the Australians were seen with two pieces of white flint, and a tinder of the inner bark of the papyrus. The kindred Andamaners keep their fire in a hollowed tree, sheltered from the weather with two or three feet of ashes, so that live fire may always be found at the bottom. Our Tasmanians, at any rate, wished to save themselves trouble, by carrying fire-sticks with them wherever they went. They sometimes held it between two pieces of bark, as do many Australian tribes to this day.

Tales have been told of fireless people. The Spaniards said so of the Chatham Isles, and the Portuguese of the Ladrones; but Magellan himself has not a word about it in his account of the people. It was 180 years after that, in the book of one of the Jesuits, a remarkable narrative is given of Magellan having set fire to the huts of this thievish race, when the men climbed up to pull the savage red beast away from eating up their homes. Even Commodore Wilkes, in 1841, was so deceived about the Bowditch islanders; though another traveller gives us the tradition of that people of the origin of fire, brought by a goddess from below the sea. A fireless race was described in 1730—a long-eared people in French Guiana. Dr. Krapf heard the same of the Dokos, a nation of dwarfs to the south of Kaffa and Susa, in Central Africa.

The Tasmanians made use of fires for signals. According to the intelligence intended to be conveyed, the smoke was great or little, black or white. They never made a large fire at night, and so arranged it that little smoke, and that in faint, uncertain columns, rose from it. This custom, in a country so abounding in forests, as with the Indians, may have arisen, some think, from fear of night surprise in war. But, as the same practice exists among the Australians, who, with the Tasmanians, never attack an army at night, some other explanation must be found, and that connected with their origin. For cooking purposes, especially when a big kangaroo has to be prepared for dinner, a large fire is a necessity. The family fire was always small, and replenished stick by stick; whatever the weather, and however warm, a fire was essential. At night it kept bad spirits away. When the poor creatures were so harassed in the Black War, they feared to make fires, as these would indicate their position to their implacable and night-travelling enemies; and they often

suffered from cold, or ate their food raw, when they could not gain some supposed inaccessible place.

A few words may be added as to the modes of fire-getting elsewhere. The Tasmanian system of two sticks prevailed among the ancient Mexicans, as illustrated in some of their ancient paintings. The Hindoo Vedas say that the first man got fire from rubbing together two sticks of sacred wood. Sanchoniatho, the Phœnician, says of the three first mortals, Phos, Pur, and Phlox: "These found out the method of producing fire by rubbing pieces of wood against each other." The Yenadies of Coromandel still get fire by the rotation of two sticks of *Cordia myxia*. In Sumatra they rub the sharp edge of one piece of bamboo against that of another piece. Some Dyaks of Borneo have a slender cube of lead, fitting closely in a case of bamboo. The top of the cube is hollowed into a cap, which is filled with tinder. The leaden pistol is held upright in the left hand, while the bamboo case is thrust backward and forward over it. By this means the tinder is set alight. Or, they make a rude cross notched in a dry stick, and spin round in it the point of another and harder piece of wood. In the Bathurst Isle of North-west Australia, the inner bark of a papyrus plant is ignited through two white flints.

A very great progress marked the next step. A thong drill was used around one stick, as a more easy and expeditious mode than merely twirling the stick with the two hands. The Maories make use of such a drill to make holes through the hard jade for ornaments or weapons. The Veddahs of Ceylon use a stick drill. The Guanches of Canary did so.

As CANNIBALISM is associated with food, and our Tasmanians stand chargeable with the crime, it must be alluded to here. Several cases have been narrated by early voyagers of bones of men having been found with burnt pieces of flesh still hanging to them, and it was at once concluded that this was decided evidence of cannibalism. But, as the Blacks of that southern coast were accustomed to burn their bodies, and bury the ashes, the proof of the custom is far from being established. Two excellent authorities, Mr. G. A. Robinson and Mr. M'Kay, who spent so much time among the race, deny the impeachment.

The practice is either a question of taste, or the gratification of revenge. M. Roches says, that with the New Caledonians it

is an affair of taste and instinct. With one of the Papuan races of New Guinea, people, when old and useless, are put up a tree, round which the people sing, "The fruit is ripe," and then shake the branches, tear the falling creatures to pieces, and eat them raw. With the Flores Islanders, the son cuts up the body of the father, and sells the pieces. The Fanns have their butchers' shops of joints of men. The Fuegians, when very hungry, will select an old woman, hold her over the smoke of a fire to quiet her, and then, after a hasty roast, devour her. It must have been a matter of taste, when the Cyclops of Homer indulged in it; when Zeno, Diogenes, and others, defended it on *moral* grounds; and when certain epochs in countries, as with Egypt in the thirteenth century, are marked by a craving for that food. In Europe, Sawney Bean, of Galloway, is not the solitary instance of a propensity for such dishes. It is not a necessary mark of low civilization. The Battaks of Central Africa, as well as the Fanns, are given to this loathsome practice, but are otherwise advanced in arts, and gentle in manners.

The Tasmanians' neighbours, the Australians, often indulged in the practice, and, in some parts of the interior, do so still. Moreton Bay missionaries thought they ate their own children, sometimes from love or grief. New-born babes have been eaten, to give back to the mother the strength they had taken away. The body of poor Gray, the companion of Burke and Wills, was dug up and devoured. Morrill, who lived so many years with the Blacks, says distinctly: "Parents eat their own children, and usually they eat the bodies of those killed in fight." The Tasmanians may, therefore, in the depths of their forests, have indulged in this practice, once adopted by our own ancestors in Britain, and known in the far distant prehistoric period of the cave-men of Devonshire.

CHAPTER IV.

DRESS AND ORNAMENT.

THE Aborigines were usually naked, except in very cold weather, or in seasons of sickness, when a kangaroo or an opossum skin would be thrown over the shoulders. In a semi-civilized state, the dirty blanket had a hole made, through which the head protruded. The men had a string of kangaroo sinews or plaited rush girdle round their waists, in which to place their waddies. The women sometimes wore a sort of garter and bracelet, with an ankle band, made of the skin of the kangaroo. Both sexes thought it nothing discreditable to appear in Eden costume. In the *Hobart Town Gazette* for September 1825, there is a letter to the editor, complaining of the appearance of the Blacks when visiting town, saying, "It is disgusting to behold the state of nudity in which they wander about our streets." I have repeatedly been amused at observing the Australian natives prepare for their approach to the abodes of civilization, by wrapping their blankets more decently around them, or putting on their ragged trousers or petticoats.

Though less given to adornment than many natives, they had their modes of making themselves attractive. Upon their chests, thighs, and shoulders they had cicatrices or scars, which presented the appearance of parallel ridges. The body was rubbed over with a mixture of red ochre and the fat of the wombat, seal, or kangaroo, or the oil of the mutton-bird; but this was useful as a defence for the naked skin against insects and changes of weather; it certainly was a check to life in the hair. The Thibetian women are equally innocent of washing, and use a greasy defence against the wind. The islanders of the South Seas prefer turmeric and sweet scented oil. Mr. Jardine, the North Australian explorer, relates how he found much comfort in using grease to protect his skin from the cold, the wet, and

the mosquitoes. In Marquesas the ladies use the green juice of a plant to soften their skin. A dash of powdered charcoal served the place of the rouge of civilization, and dark lines beneath and above the eye gave the effect of the Kohol of Turkish harems. The Tasmanian word for the iron-ore black paint was Lattawinné. Dandies drew fancy streaks of red ochre and plumbago over their bodies, the artistic display of which brought no small applause from the belles of the forest. The plumbago was obtained from the Hampshire hills. Red Hill, eight miles from Quamby, was one place which supplied the ochre. The red iron ore was roasted first. On the Bogan river of New South Wales crimson is used for the abdomen, shoulders, nose, cheek, and brow. In the caves of South France, where remains of a primitive race have been found, the soft red hæmatite sides are covered with scratches, as though scraped of old to mix with grease.

The ochre and grease were richly bestowed upon the hair, until it became a stiff and tangled mop, somewhat after the Fijian stamp. The thin curls were often induced to hang round as corkscrews. The adorning of the head was a morning's work of no trifling character with those who studied and followed the fashions. Their friend Dr. Ross adds: "In this respect they resembled some of the civilized race, whom I have seen besmear their heads with perfumed pomatum." Cleopatra has the credit of introducing bear's grease. Others prefer crocodile fat, ghee, crow's-liver oil, nut oil, swallow's dung, as ingredients. A traveller saw a Tasmanian make a vain attempt to stick a woman's comb in his knotted locks. The females sought to increase the power of their charms by a bald pate. With sharp flints, or pieces of glass in more recent times, they performed the barber's operation upon each other. But they were by no means indifferent to the use of red ochre, charcoal, and grease.

More than once do we read in history of serious revolts taking place in consequence of interference with the *heads* of nations. The Czar Peter nearly lost his throne for infringement of the liberties of Muscovite hair. A rebellion, in like manner, nearly burst out on Flinders Island, whither the remnant of the Tasmanians were removed, when orders were once issued forbidding the use of ochre and grease. The seniors were indignant at this invasion of their rights, at this badge of their

slavery; and the young men feared the loss of favour in the eyes of their countrywomen. As folks of old fled to caves and deserts to enjoy forbidden rites, so did our Natives solace themselves in the scrubby retreats of the island with a secret rub of their beloved mixture. They did not distort their hair as many nations do; nor did they, like the Kekwick Ponds tribe of Central Australia, rear a helmet network on their heads.

Men often wore round their necks divers folds of kangaroo sinews, rolled up in red ochre and grease, and both sexes often wore a head fillet of cord. Necklaces and head-bandages of spiral shells were not neglected; or, in the interior, pith-beads were strung together, or cord and rush plaited, for a similar purpose. The shells were perforated with an eye-tooth, or strong fish bone, or were deprived of their tips by the teeth, then strung on kangaroo sinews, afterwards smoked over a fire of green leaves, and finished off with a polish of the oil of birds or other fatty matter. Such clusters were known by the name of *Merrina*. Labillardière heard them called *Canlaride*. They were formed of *Mariner* shells, Swainson's Elenchus, which I have picked up on the beach of D'Entrecasteaux's Channel, and which abounded on Satellite Island of the channel. I had the honour of having a necklace prepared for me by a couple of ebon beauties of Tasmania. The shells were boiled in some diluted vinegar, which was begged from the lady of the station, and were then well rubbed with fat to bring out their brilliant rainbow hues. Such shell-necklaces were common with the ancient Britons. The Fuegians string their turbinated shells on a delicate five-stringed plaited cord. Shells have been found that had been threaded for ornaments by the prehistoric Belgium Cave-diggers. In an aboriginal tomb near Dublin, under the head of the skeletons, were found shells which had been rubbed down on the valve to make a hole. A flint-knife and part of the necklace string were there. Three thousand shell beads were found in one tomb of the Mound-builders of America.

Both sexes would occasionally adorn themselves with fillets of flowers on their heads, especially the climbing Clematis, or white virgin's bower, whose delicate bunches of blossoms would contrast agreeably with the dark skins. The Boronia was another favourite of the woods, with its scented leaves, and its pretty little red flowers tipped with green; it furnished a name to

PÉRON'S SKETCH OF PARABER

PERON'S OURIAGA

many a sprightly maiden there, as the Rose of Old England with us. The sweet, blue, festoon climber Comesperma entwined the brow of a beloved one at the moonlight festivals. The men would stick a few kangaroo teeth or cockatoo feathers in their hair. The bones of relations were worn round the neck, less perhaps as ornaments than as charms. Wooreddie, the Bruni chieftain, and husband of the interesting Truganina, had a necklace of three rows of small univalve shells round his neck. Upon his breast hung the jawbone of a deceased friend, wrapped up in the fibres of a sort of flag. The plant was passed over a fire until the friable part of the green bark stripped off, when the fibres of the stalk were easily twisted into a rough string.

Some of the women had a girdle made of filaments of bark, to which they attached the bones of deceased friends. A similar string-fringe on the mainland opposite is called a Kuntye. Girdles of human hair, called Gadlotti, near Adelaide, and Kerrerum on the Murray, are common in Australia. Such a string round the head is Manga by St. Vincent's Gulf, and Kakkalle by Encounter Bay. At Cape York the women twist grass for a belt, and suspend a front fringe of strips of palm-leaves. On Coburg peninsula a mat of rushes is worn in front, not behind, as worn by the young mother of Port Phillip seen by Major Mitchell. A fur string or band of emu feathers conceals the pubes in some tribes, but only on great festive occasions.

It is pleasing to know that the Tasmanian women, beyond the close-cutting of their hair and the display of cicatrices, did not seek to enhance their beauty by the compression of feet, like Chinese, or the more serious restriction of respiration, like English ladies. They cared not, as the Samoans do, to please the young men by contrivances to present a full breast with the nipple artistically turned upward. They were wisely content to preserve their body in healthy and natural action.

NECKLACE SHELL.

CHAPTER V.

AMUSEMENTS.

In their wild state they were a merry people. Occasional skirmishes with neighbouring tribes gave new zest to the festive evenings. It was not until they found themselves engaged in the bloody and hopeless contest with the White, that they became morose, sulky, sullenly wretched. Rarely do we hear of corrobory shouts of joy and fun during the latter, the dying, years of this race. Their songs had a melody to please themselves, if not quite agreeable to our ears. Eye-witnesses record instances of intense emotion produced by these native lyrics; tears would be shed, and tumultuous passions excited. We have one song brought down to our times by Mr. Davis, some time resident among them.

SONG OF THE BEN LOMOND TRIBE.

"Ne popila raina pogana,
Ne popila raina pogana,
Ne popila raina pogana.

"Thu me gunnea,
Thu me gunnea,
Thu me gunnea.

"Thoga me gunnea,
Thoga me gunnea,
Thoga me gunnea.

"Naina thaipa raina pogana,
Naina thaipa raina pogana,
Naina thaipa raina pogana.

"Naara paara powella paara,
Naara paara powella paara,
Naara paara powella paara.

"Balla ugh,
Balla ugh,
ugh ugh."

This guttural termination of all their songs was also a war-cry among them. All their chants abounded in repetitions of words or lines in a monotonous but not inharmonious strain.

Another song has been preserved, sung with the dance in honour of a chief.

"Pāppĕlă Rāynă 'ngōnÿnă, Pāppĕlă Rāynă 'ngōnÿnă
Pāppĕlă Rāynă 'ngōnÿnă!
Tōkă mēnghă lēăh, Tōkă mēnghă lēăh,
Tōkă mēnghă lēăh!

Lūghă mēnghă lēăh, Lūghă mēnghă lēăh,
Lūghă mēnghă lēăh!
Nēnă tāypă Rāynă poōnynă, Nēnă tāypă Rāynă poōnynă,
Nēnă tāypă Rāynă poōnynă!
Nēnă nāwră pēwÿllăh, Pāllăh nāwră pēwÿllăh,
Pēllăwăh, Pēllăwăh!
Nēnă nāwră pēwÿllăh, Pāllăh nāwră pēwÿllăh,
Pēllăwăh, Pēllăwăh!"

A shorter one is added.

"Wānnăpĕ Wāppĕrĕ tēpărŭ,
Nennome pewyllah kellape.
Māyngatea.
Māynăpăh Kolah māypĕlĕă
Wappera Ronah Lēppăkăh."

Many songs, like their dances, were copied from other tribes. Some Dibdin, Moore, or Burns of the forest would originate some humorous or pathetic ballad, which might be transmitted with its appropriate tune over the island, without its meaning being understood by any but the original tribe. Both sexes joined in the tune. They were fond of making a *b-r-r-r-r-oo* by blubbering lips over closed teeth. The subjects of their poetry were incidents in their history of the day. Most frequently it was a sort of improvisation; in which, doubtless, some gained a celebrity similar to the Improvvisatori of Italy. I have noticed in the songs of the Australians a reference to European bystanders, unmistakeable to any, which with due mimicry gave great fun to the black fellows. Peculiarities of appearance were hit off, and the chorus sung with laughter; often reminding the voyager of the sailors' pump song, in which may be particularized "that girl with the blue dress on," &c.

One ignorant of their language could distinguish the sentiment to be warlike or pathetic, by the modulation of voice, the tenderness or vehemence of expression. In some songs they would pause at the end of a stanza, in perfect silence for some moments, and then recommence. I was much surprised the first time I noticed this, near Mount Lofty, of South Australia, at the suddenness of the stoppage, the rigidity of posture in the midst of a violent dance, the dead stillness even of the chattering of the *lubras*, and then, as suddenly, the rush of tongues and feet. Mr. Protector Robinson remarks of the "Black War" period of Tasmanian history: "At this time several of the most popular songs of the hostile Aborigines consisted in relation of the out-

rages committed by Blacks on the Whites, in which they repeat in minute details their predatory proceedings, such as taking away fire-arms, tea, sugar, &c., and kneading flour into bread."

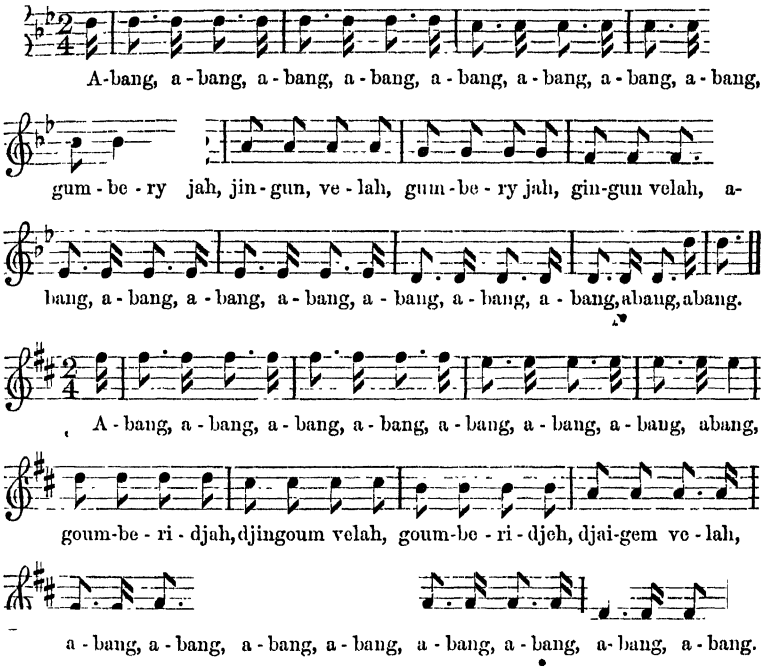
While many Europeans saw no melody in their ballads, Labillardière wrote: "The others attempted more than once to charm us by songs, with the modulation of which I was singularly struck, from the great analogy of the tunes to those of the Arabs in Asia Minor. Several times two of them sang the same tune at once, but always a *third* above the other, forming a concord with the greatest justness." How fortunate were our Gallic friends! Other travellers and colonists have never, perhaps, listened to such a Tasmanian aboriginal duet.

Dr. Ross says, in the *Courier* of 1832, "They sang several of their national songs; but their music is of the rudest kind, being little more than the frequent repetition of the same note in soft, liquid syllables. The general character of their music may be described in words almost as intelligibly as by dotting the notes down. They begin by singing a third from the keynote several times, and finish with a third above the keynote. They sometimes vary it by suddenly running into the octave. Their music bears a close resemblance to the monotonous chant of the Highland bagpipe." This resemblance came to my mind when listening at a little distance to an aboriginal song. Walking out in the evening by the sea-shore of D'Entrecasteaux Channel, I heard a low chanting tune of the Tasmanian old women of the station, which had a peculiarly mournful sound, and in which I detected a droning hum with a shriller note. As I was then dwelling upon the fate of the remnant of that people, their song struck me as a Banshee cry of coming death. At any rate, the Quaker traveller's criticism could be adopted by others: "To me their songs were not unpleasing; persons skilled in music consider them harmonious."

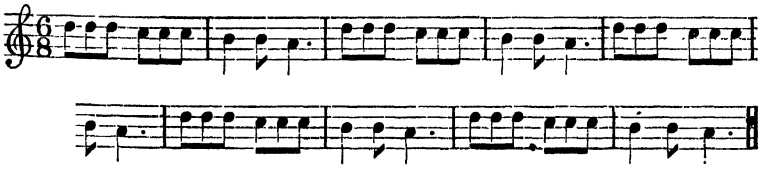
In 1825 Mr. Barron Field, of Sydney, published the following song of the New South Wales' natives, which was said at the time to be very similar in sound to some Tasmanian chants :—

AUSTRALIAN SONG.

By Barron Field, 1825.



But Captain Freycinet has given us a true Tasmanian tune of the oldest date.



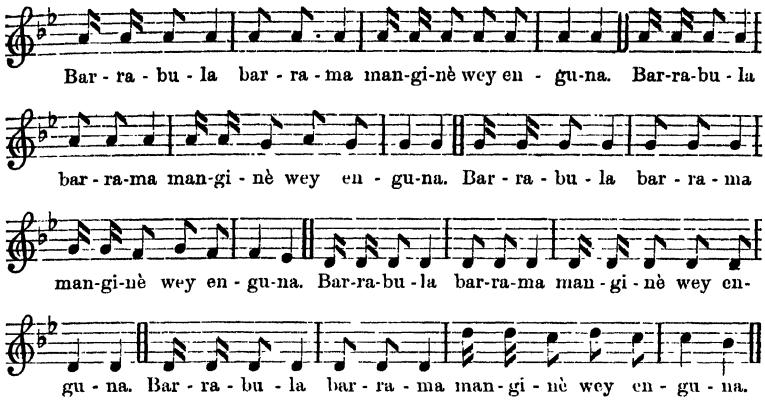
In Carl Engel's "National Music" we have some pleasing references to the songs of savages. The author tells us that "not every nation possesses a complete scale, *i.e.* a scale extending to the octave. The tunes of savage nations are frequently

in the small compass of but five or six consecutive notes. The old *Runo* songs of the Finns extend only from the *tonic* to the *fifth*, and there are even national tunes which do not extend beyond the compass of a third." Some Australian and Tasmanian songs were said to be of the latter class. A kangaroo dance has a succession of this range—three *d*'s, three *c*'s, two *b*'s, and one *a*. The Marquesas and Maori natives have semi-semitones; the intervals are like the enharmonic genus of ancient Greeks. The Frenchman who described his Diemenese as adding a third as an accompaniment, although scarcely believed at the time, is not alone in his faith in the tune of barbarians. Lieutenant Moodie relates of the Hottentots: "They instantly added the *second* of their own accord, as if by natural instinct." When the Ethnological Society carry out the suggestion given by Dr. Dieffenbach, to collect materials for a "Comparative Music of the Races of Men," we may find this a no uncommon power. "A Fuegian," says Commodore Wilkes, "sang the diatonic and chromatic scales, following a violin."

The Tasmanian and Australian music was largely *minor*. Dr. W. C. Müller thought the minor key of savages arose from the habit of uneducated people to intone the major third rather flat. In Europe the *major* prevails. Of a hundred tunes, 98 were major in German, 82 in Irish, 78 English, 72 Scotch, 70 French, 69 Welsh; while the Italians and the Danes had half of each. The Russians had but 35 major, and the Swedes 14. Carl Engel declares that 19 of 25 were major in the Chinese; 59 of 69 in the Hindoos; while of 40 in Malaysia 28 were major, 4 minor, and 6 uncertain. Like as in most of Africa and Asia, whistling was not a Tasmanian accomplishment. The Tasmanians did not sing in falsetto as Chinese, nor bass as Russians, but tenor as Hottentots. The *Whoo*, or screech at the end of their songs, was an octave above the keynote; with the Maori it is an octave below.

The first native song was published by Mr. Edward Jones of London in 1811, in "Musical Curiosities." It was taken from a love-song sung by Bennilong and Yamroweng, on their visit to England in the beginning of this century. "It shows," says Carl Engel, "a succession of diatonic intervals in descending." It is placed in two flats.

SONGS OF BENNILONG IN ENGLAND.



Captain Tench, who visited Port Jackson in 1790, left a record of aboriginal music. "One of these songs," said he, "which may be termed a speaking pantomime, recites the courtship between the sexes, and is accompanied with actions highly expressive. I once heard and saw Nanbaree and Abaroo perform it. After a few preparatory motions, she gently sank on the ground, as if in a fainting fit. Nanbaree, applying his mouth to her ear, began to whisper in it; and, baring her bosom, breathed on it several times. At length, the period of the swoon having expired, with returning animation she gradually raised herself." Labillardière, who so praised the Tasmanians' singing, heard three New Caledonian fair ones at a concert, "keeping time," said he, "very exactly; but the roughness and discordant tones of their voices excited in us very disagreeable sensations." Inferior thus in artistic ability, they were, in his judgment, far lower in moral sentiments to the women of Van Diemen's Land, and they exhibited a commercial keenness in the unsolicited sacrifice of their charms.

Major Mitchell informs his readers that once he was introduced to a Bush beauty who "on his approach sang a beautiful song, rapidly running through the whole gamut." The following was a favourite corrobory song of a tribe at the junction of the Goulburn and Murray:—

"Beni berri ma Lildomba,
Beni berri ma Lildomba,
Berri berri ma Lildomba-naga,
Athen Lindima no goi ee la
Lindima-Lindima O-en de then-o
Wenim bange Berri berri ma Lildomba-a
Berri berri ma Lildomba berri beni ma Lildomba."

The Tasmanians' word for *fun* was Riawena in the east, Luggara in the south, and Riawé in the west. That for *song* was Riacunnah with the eastern tribes, Lunariabe southern, and Riacannah north-western.

The substance of the following pretty legend, sung or said around the native fires, appeared in the *Hobart Town Magazine* for 1834. For several years I resided at the spot honoured as the scene of this romantic incident.

About fifty years ago, as the story goes, a native family dwelt in Amboo's Bottom, in the pretty district of Glenorchy, a few miles from Hobart Town. Atawa was blessed with a dutiful daughter, the flower of the tribe. Beset with suitors, and constantly attended by admirers, she was bewildered like other ladies in the maze of flattery, and knew not upon whom to bestow her angelic qualities. The tall and graceful Amboo relieved her from her perplexity. Who had whiter teeth, nobler limbs, better greased and ochred ringlets? Who could so exquisitely give the tremulous thigh-shake in the moonlight corrobory, so adroitly waddy down the feathered throng, so fleetly chase the kangaroo? More than all, who could so chant a love lament, so whisper a moving tale, or so gaze at her? It is enough. Makooi is vanquished, and Amboo is the conqueror. But jealousy is cruel. The revenge of other devotees is to be feared. The public opinion of the tribe, always supreme, might forbid the banns.

What was to be done? In Tartary the lady is mounted upon the best horse and given a distance. The suitors then ride after, and he who catches wins. *There* a lady has a chance of going too much on one particular side, making a false step at a convenient place, or using any or other of these ruses of the gentle art of courtship which may secure her choice. Poor Makooi had recourse to a poetical expedient. She proposed to her lovers that, at sunrise in the morning, they were to search in the Derwent for a flower which she would drop into the waters

at night, and that with him who should bring back the same she would share the leafy *Gunyah* for life. It was full moon when this dark Flora of the forest hills gathered the gorgeous favourite Waratah, and carried it to the rocky margin of the river. Without a faith, she had no god, no patron saint, to invocate. But her heart pulsed forth Amboo, as the moon's beams softened the scarlet of the floating floral beauty.

The tide bore on the precious freight. The hills glowed at the first glance of the sun, and the bank was trodden, and the stream scanned, by eager seekers. The day passed; one after another returned, but the flower was not presented. One only was absent, the ardent Amboo. Hopes for his success were now mixed with fears for his safety in the breast of the maiden. He came not; he never came. The flower was not brought to the sweet gully of Glenorchy, and Makooi was free. Alarm for the lost one sent the tribe in search. A violent storm on the trial day had removed the track of the Tasmanian Adonis, and the search was in vain. The heart-broken girl lingered for a few months, and the trailing Kennedia lay its crimson blossoms on her tomb.

About the year 1832 some persons were quarrying on the banks of the Derwent, not far below the scene of our story. A huge block had fallen from the top of the rock. Removing this, they discovered a human skeleton, and tightly clasped within its bony fingers was a withered flower-stalk. Might not this have been the remains of Makooi's lover, who, seeking shelter under the rock from that eventful day's storm, was crushed by the mass detached from the hill?

Dancing was the favourite amusement of the men; for only upon very extraordinary occasions were the ladies permitted to waltz with the gentlemen, though indulging at times in a merry dance among themselves at home. During this pleasing exercise, the performers were unencumbered with heavy drapery, preferring the Eden robe of simplicity, if not of innocence. While Asiatic peoples prefer the dancing executed by hirelings, and only women, for their amusement, and wonder at the European impropriety of respectable persons engaging in such play, and especially of the two sexes together, most savages, like Australians, Indians, &c. keep the monopoly for the masculine feet. The Tasmanian women were, however, permitted now and then to

exhibit their charms and agility before their lords; and such movements were not more remarkable for their chastity of expression than those of more civilized races in ancient and modern times. But while some see in the Spanish fandango the most suggestive and obscene attitudes, others cannot find fault with the *easy virtue* dances of the Polynesians. Thus Mrs. Wallis says of the Fijian, "Some of their movements were graceful, some ridiculous; but none which the most chaste might not witness. Every part of the body appeared to be more exercised than the feet. The figure of the dance was difficult and pretty. Could the polka-dancers of civilized lands witness this, they might learn modesty at least." The morals of dancing may be, therefore, but a matter of taste. As the Tasmanian belles were the musicians for the men, when they danced themselves they had to beat their own time, which was done by the flapping of their pendulous breasts.

Their dances were often imitations of animal movements. The kangaroo dance was one of leaping. The emu dance was interesting to European spectators. A number of men would pass slowly round the fire, throwing their arms about to imitate the motions of the head of the animal while feeding. One hand behind would alternate with the other in front, coming to the ground, and then rising above the head. Messrs. Backhouse and Walker witnessed on Flinders Island a coach-and-horses dance. A lot of men laid hold of each other's loins, moving round in a circle at a gallop, one holding back as if reining-in the others, while a young woman applied a whip lustily upon the backs of the horses, to hurry the creatures on. The thunder-and-lightning dance was performed with a peculiar rolling of the body and a pattering of feet and hands upon the ground. Another dance was simply a springing up a considerable height, all fours. One celebration was not unlike that related of the Andaman Islanders by Mr. Colebrook, who said they "danced in a ring, each alternately kicking and slapping the lower part of his person *ad libitum*."

A settler makes mention of a singular dance in the forests of the beautiful southern island. An old woman rose up, and began most volubly to abuse the men on the other side, chanting their misdeeds in high key. One of the lordly sex advanced, chanting likewise, and appearing to reply to the insinuations of

the crone. Then he rattled off an energetic foot movement, while a number of the other women joined in his song, as if defending his cause.

The female dances were usually supposed to be exercised in private, and were conjectured to relate to events of woman's life in the woods, her clamber for opossums, her dive for shell-fish,

AN AUSTRALIAN DANCER

her dig for roots, her nursing of children, and her quarrels with her spouse. But stock-keepers and sealers have spoken of dances not so correct in tone. Péron saw such in 1802, when the women danced before him and his mate, in the absence of their husbands and fathers; but he kindly and charitably adds an apology: "Some of them," he remarks, "might be reckoned exceedingly indecent, if in this rude state of society man was

not utterly a stranger to delicacy of thought." It is to be feared, on the contrary, that the motive was no chaste one. An old Tasmanian bush-rover described a dance not unlike that, sometimes practised before one of the Murray tribes, with the avowed intention of exciting the passions of the men, in whose presence one young woman has the dance to herself. In that case, the hands are placed behind the head, with the feet and knees close, when the legs are thrown outwardly from the knee, the feet and hands preserving their first attitude; then, when the legs are drawn in again, a sharp report is heard, to the delighted "Ugh!" of the masculine spectators. The women wore a covering of leaves or feathers in the dance. The Amazon Indian women also cover themselves with a small apron in front when dancing, but which, with Tasmanians and Australians, is removed directly after.

The corrobory in the Tasmanian woods was very similar to that of the Australians, being held chiefly by moonlight, though by no means confined to that season. A great corrobory took place at the full moon of the month of November each year, when the various tribes made peace, and assembled beyond the Ouse river. No one gives an account of the proceedings at this annual meeting, and no one records the sight of a corrobory on a large scale, as the tribes rapidly retreated before the Whites, and at no time were fond of displaying themselves, as their neighbours across the Straits have been.

Having seen some grand celebrations in South Australia and in Victoria, especially at the full moon nearest the Queen's birthday, when blankets and silver coin fell to the lot of the tribes who then assembled at Adelaide, perhaps the English reader will please to accept of the recital of my own observations, for the appreciation of even a Tasmanian corrobory. It will be seen that my sympathies are not quite the same as those expressed by a colonist, thus,—"It is hardly possible for the imagination to picture a scene more infernal." To quote, then, from one of my former works:—

"The moon is full; and the hills which had glared in the noontide heat, and sympathised with the declining sun in varying hues of gold, of purple, and of ashy grey, now sleep in the soft and soothing light. The laughing jackass has carolled his farewell note, while from the valley there rises a strange mys-

terious sound. We go nearer:—there, amidst that dusky mass, we distinguish the plaintive chant, the tapping of time-sticks, and the muffled murmur of opossum-rug drums. Various companies are sitting round small fires, which are occasionally bursting into blaze as dry boughs or a few leaves are laid on the embers. Women have folded their rugs and placed them between their thighs, and now beat them with the open palm of their hand Some are seated cross-legged, singing a mournful dirg with their eyes downward, and with a melancholy aspect. There is no interruption, for the tune subdues the loquacity of the loquacious tribe. A livelier air succeeds; the old men beat their sticks quicker, the tum-tum is louder, the eyes brighten, a laugh now and then interludes, the prattling begins, and with the last sharp, shrill chord rushes in a tumult of noisy merriment.

"But the corrobory is to begin. Certain important-looking old gentlemen are gliding about, consulting and giving directions about the fête. The performers see that the pipeclay lines of beauty upon their bodies are in proper order, redaubing where necessary. After an amount of fussing, coquetting, fidgeting, and confusion, worthy of a more civilized reunion, there is a fall to places. The ladies squat near the fires, clear their throats for a song, and give an extra tightening to their drums. The old men sit or stand in groups. The young men spring blithely into the centre, accompanied by an involuntary 'Ha! Ha!' of admiration from the throng of ebon beauties. Some little bantering passages between the sexes are silenced by the seniors, in growls from their white-haired lords, and spiteful snappings from the shrivelled hags of mammas. Silence is called. The ranks are formed. The moon's beams rest upon the naked performers. With bunches of gum-leaves in their hands, and others round their ankles, like flying Mercuries, the dancing men are ready. The band strikes up. Slowly moving their bodies from side to side, the young men gracefully and tremulously move their hands to the measure. At a signal, the legs commence a similar motion, having a most grotesque and unnatural appearance. The flesh of the thigh and calf is seen quivering in an extraordinary manner. This excites deep interest in the spectators. Exclamations of delight issue from the eager witnesses of the performance, at some peculiarly charming and difficult wriggling of limb. After sundry chasséeing, the men break

their line, rush together in a mass, without disorder or confusion, leap upward in the air, wave their boughs over their head, utter a loud 'Waugh!' and, bursting into laughter, join in a *mêlée* of chattering, and receive the hearty congratulations of their friends. Some of the enthusiastic females persist in grasping our hand, and pointing to the distinguished actors, with a roguish, merry leer, cry out, 'Bery good dat corrobory; bery good black-fellow; you gib him tixpence!'"

TASMANIAN BALL BELLE (*A sketch by Mr. Glover, R A.*)

CHAPTER VI.

ARTS AND MANUFACTURES.

THE Tasmanians lived in that reputedly happy state as to be independent of most appliances of civilization. Dr. Ross spoke of the manufacturers of all sorts "thrown into the shade by the aboriginal ladies and gentlemen. Diogenes in the tub is a slave to luxurious life compared to them." That philosopher could have learned from them to drink without a cup, and eat without a platter.

Their manufactures were, in short, confined almost to weapons by the men, and baskets and nets by the women. The latter were made of rushes, grass, and strap-shaped leaves of cyperaceous plants growing on the sand-hummocks; or from the fibres or string of the Corrijong or cordage tree, the Sida, whose pretty little white flowers, and tall thin stems, are found by the sides of creeks and swamps. The string made by the women was nearly equal to English whipcord. I have a piece made for me by an aboriginal woman, upon my requesting that favour. She got hold of some fine fibres, bared her thigh when squatting on the ground, and began to twist the threads by rolling the material up and down her thigh. The Hottentots so manage with their string. A sort of hand-twisted thread, hand-weaving, and rude network have been discovered in the lake dwellings of the primitive people of Europe. Mr. Tylor, the ethnologist, states that only lately an old woman in the Isle of Islay, Scotland, was seen spinning flax with the spindle and stick, having a potato stuck on one end of it. The naked Tasmanians never had civilization so near to them as the inhabitants of the Hebrides had. They made no stone whorls with holes in the centre.

The baskets were often made of the leaves of the Dianella, a shrub with blue flowers and berries. The leaves were first drawn over a fire to soften and make them flexible. A fine

which is said to return to the man after use, as the boomerang will do.

The Tasmanian wars were attended with little loss of life. The waddy was employed in duels, when no unfair advantage was taken, but each party in turn presented his skull as a mark to his antagonist. The toughest head gained the day. Sharp stones were thrown when the combatants closed in no friendly embrace. An old colonist told me that some fifty years ago he saw signal fires on the hills to the westward, when the Stringy-bark mob of the Deloraine country were marching to the attack of the western mob at Native Plains. In 1828 three mobs or tribes—the Oyster Bay, the Stony Creek, and the Swanport—went against the Port Dalrymple on the north. There were two motives for war—to repel a trespass upon the hunting-grounds of the Swanport tribe, and to obtain by force of arms a fresh supply of wives, they having lost many of their own through being too near the settlers. However, they made up their differences, and all joined in the struggle against their common and more formidable foe—the White holders of their plains.

The most interesting articles in use by the men were the stone axe and stone knife. They were both in a rough condition, not so smoothed down as the *mere* of the New Zealander. The stone axe was generally chipped to an edge, and differed only from the knife in its size; the knife was seldom seen except to open shell-fish or scrape spears. The stone was bound in with withes, put in a forked branch, or fitted on to a stick by means of the adhesive gum of the Xanthorrhœa or grass-tree, and bound with strongest native string, as did the ancient Mexicans. The greenstone or basalt was the best material, as with the Caithness men and the Aborigines of Glasgow. Mr. Laing describes a Scotch one as "among the very rudest ever used by man." On the continent the Australians prefer the phonolite, as a harder character of the volcanic rocks. Near Mount Macedon, Victoria, the old quarry of the Blacks was compared by Blandowski to a deserted gold-field, having covered nearly a hundred acres. The axe was a tool and not a weapon. It cut notches in the tree for ascent after opossums. It cut down trees for spears and waddies, fetched off the bark for huts, and broke the hard univalves for food.

This tool served the purpose of the *celt*, or chisel, so prevalent among barbarous nations in all ages. Fixed in a cleft stick, and fastened with gum and native cord, it did good service. The Papuans generally use triangular flakes of stone. The Picts of Scotland had those of slaty cleavage. In Mexico they prepared them of obsidian. The South American Indians often rub down pebbles to an edge. The stone weapons of Europe were usually pierced with a hole; though some, as in the Orkneys, &c., were, like the Tasmanian, without it.

The Tasmanians would pick up any stone, knock off its edges, and apply it for immediate use. Thus did the Drift-men of ancient Europe. The stone flints or stones of the Reindeer Folk of France were as rough as those of our islanders in the south. The hammers were usually held in the hand. They had none with a groove round for a string, as in Britain. The fact of the use of such stone knives being commanded by Joshua (see chap. v. verse 2), and the later employment of these in more civilized times for the same purpose—circumcision—is an illustration of the primitive employment of those tools. In the barrows of Britain, celts have been discovered highly polished as well as ground; but the Victorian Blacks of the Glenelg have been seen with as good. The hatchet blades were double convex. They were not ground all over, however, as those of the New Zealanders. In Ballarat, twenty-two inches from the surface, was found a remarkable bluestone mallet, eight inches by four, weighing five pounds. One end was rounded, and the other pointed; the middle part was narrowed also. An instrument like it was found in a cist in the north of Scotland. The explorer, Mr. A. C. Gregory, spoke to me of a large collection of ancient stone weapons he saw in a native tumulus near the sea-coast. A year ago a writer from Camden Harbour, of North Australia, describes one made "from quartz and vitrified lava, and with a finish and ingenuity that would puzzle many an English workman." Neither in Tasmania nor Australia were arrows used. We cannot expect, therefore, to find the flints of such in the Kjokkenmöddings of either place, though the flakes or chippings of other weapons or tools are frequently met with.

The boomerang has been so admirably described by Colonel Lane Fox, Secretary to the Ethnological Society, that an extract from one of his papers will be welcomed. The philosophy of

its motion is explained thus: "By throwing these in such a manner as to catch the air on the flat side, instead of falling to the ground, they would rise in the air precisely in the same manner that a kite," &c. Again: "The plane of rotation, instead of continuing perfectly parallel to its original position, will be slightly raised by the action of the atmosphere on its forward side. When the movement of transition ceases, the boomerang will begin to fall, and its course in falling will be by the line of least resistance, which is in the direction of the edge that lies obliquely toward the thrower." He considers that it was not invented by the Australians, but arose "purely through the laws of accidental variation, aided by the natural grain of the material in which he worked." When I saw in the Colonel's private and justly-celebrated museum the succession of weapons as arranged by this gentleman, I comprehended his theory, that there is a perceptible gradual transition both from the hatchet to the boomerang, and from the malga or lliangle to the boomerang.

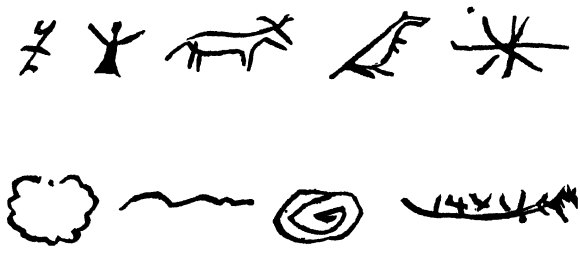
In his collection, the boomerangs of the aboriginal tribes of India are like those described to me by Sir Walter Elliot, who had frequently seen them used as a throwing-stick. But they do not return to hand like the Australian. Most seem to have a knob at one end and a broad edge at the other. The Egyptian boomerang is not unlike that still in use for hunting purposes in Abyssinia. In Africa they have the same form in iron, with side flat wings to aid flight. But none of these return. The *cateia* of the ancients was something of the sort. Bishop Isidore in the sixth century describes it in use in Europe; saying, "If thrown by a skilful hand, it returns again to him who dismissed it." The boomerang, then, is not purely an Australian instrument. It is singular that the Natives seem to make it of various thicknesses, and at various angles, according to the natural twist of the selected wood. The boomerang with its fine edge has been compared to the forearm of the mantis.

The Tasmanians had no formidable battle-axe of stone. They employed no poisoned arms, although their fellow Papuans of New Guinea, &c. do so. They threw stones, as even monkeys will do. They had no need of a shield, using the waddy for parrying blows. The Australians needed the hieleman or shield, having to contend with flying boomerangs and cruel lliangles; but that was simply an extension of the waddy idea. The heavy

shield is long and narrow, with a hole in the middle for the hand; the lighter and broader is made of bark, variously marked, and coloured with ochre. A Tasmanian defended himself with the waddy as the Samoan did, or as the Hottentot with his *keri* stick.

Our Aborigines, though an unlettered people, possessed some dim notion of the Fine Arts. As upon the sandstone of Sydney Heads are rude resemblances of fish and quadrupeds, so have marks or tokens been detected on trees and rocks in Tasmania. Mr. John Batman described some he witnessed. Mr. G. A. Robinson saw drawings of men and women, with some curious hieroglyphics, like the totems of tribes, when he was on the west coast, in 1831. Inside the substantial huts of the Macquarie Harbour tribe were found a number of sketches of birds, beasts, and men, some of which were fairly executed. Dr. Ross relates his discovery of geometrical figures, as squares and circles, on the bark in the valley of the Ouse. In the lovely vale of Belvoir, where the basaltic columns of May Hills tower over the limestone plain, a piece of bark was found, after the first two bullock-drays passed that way, bearing a really good copy of the drays, bullocks, and the men with their whips: it was better done than the markings of the cave-men of Périgord on the bones of the mammoth.

I append some rude Tasmanian sketches of men and animals, with five drawings, as seen by Mr. Commissary Browne on



a tree, representing the sun, the moon, some snakes, and five persons in a boat.

Although the Australian has received this harsh sentence from Mr. Sohier, the Melbourne phrenologist, "Arts, manufactures, construction—hardly exist in their minds," yet drawings have been discovered in many parts. Flinders speaks of one

hundred and fifty figures, done with a burnt stick, on Chasm Isle, in the Gulf of Carpentaria; and Cunningham noticed others on Clack's Island. Stokes refers to others on Depuch Island, and adds, "not the slightest trace of indecency." Red hands have been seen in Western Australia, &c., as in America. Leichhardt was very pleased with a good representation of the foot of an emu on the bark of a tree near the Gulf. Péron speaks of good figures on boomerangs. Many carvings are known at the Heads of Port Jackson—one fish being 27 feet long. There are sketches of kangaroos, sharks, fish, men, weapons, and a corrobory. As everywhere, the head has eyes, but no mouth. Intaglio hands are witnessed at Lake Macquarie, Point Piper, Port Aiken, &c. Mr. Hodgkinson relates that a boy, of the Manning River tribe, drew with a piece of chalk human heads and figures, kangaroos, &c., "with a firm, well-defined outline, which few English boys of his age could have done better, unless they had had lessons in drawing." He goes so far as to assert, "in everything requiring the exercise of mechanical ingenuity or dexterity the Australian aborigines are most apt scholars." Space will only allow a bare reference to the wonderful drawings in a cave of sandstone near the Glenelg of North Australia, discovered by Lieut. (now Sir George) Grey. The figures are very numerous, with a variety of colouring. The peculiarity is, however, that the human figures are in long dresses, and that many have a sort of halo round the head. The weapons and animals depicted are Australian, and no mouths are represented. A red hand is there, two feet long.

Poor artists as the Tasmanians were, they were not without some love for the Fine Arts. Even their language indicates it. The word for drawing with charcoal, a pastime of the Blacks, was called Macooloona by the Oyster Bay tribe, and Pallapoirena by the men of Port Davey, on the south.

HUTS.—Constantly roaming about from place to place, the natives never formed villages, nor did they require substantial dwellings. Commonly they constructed a simple *breakwind*, open to the sky. The Rev. T. Dove, formerly Catechist on Flinders Island, writes: "These children of the forest gladly quit the neat and substantial cottages which have been built for them, for the luxury (as they account it) of wandering over the Bush, or of reclining under the shade of a roofless breakwind." Rude huts of sheet-bark have been seen with the

opening toward the east, the west being the prevailing breeze. Branches of trees were occasionally tied together, and supported by sticks in the form of a crescent, the open part of which was contrived to be placed to leeward; the fire, being as usual just inside the opening, would be sheltered from the wind.

Dr. Ross saw some huts in Van Diemen's Land which he compared to a teacup broken in half, and set upon its mouth. His description of those he observed upon the Shannon, in 1823, runs as follows: "They stood irregularly within a few yards of each other, and we counted seventeen of them. From the appearance of the fires, we guessed they had been inhabited about a week before. The wigwams, or huts, were built entirely of bark, supported here and there by a piece or two of dry wood. The bark which had been stripped off the trees was piled in upright lengths close to each other, rudely joined together at the top; the whole forming but a segment of a globe, open to the east. We had the curiosity to enter two or three of these huts, and miserable indeed must have been the shelter they afforded."

Jorgenson, when at the head of a Black hunting-party, beheld better habitations near the west coast, in 1827. "They were," he says, "very well built of tea-tree branches, and well thatched with grass. They appeared much in the form of a beehive, and could with ease contain thirty persons. The Natives reside in one or the other of these huts, according to the season of the year." Mr. Robinson relates having fallen in with a similar character of edifice, when near Macquarie Harbour. These had a framework of wattles, and a thatch of reeds in regular and beautiful tiers, commencing at the bottom. The orifice for the door was small. Each hut would hold from twenty to twenty-five persons. They were calculated to last for some years, though not regularly occupied. The tribes there, as elsewhere, were wanderers; but "the violence of the westerly breezes produces such an inclemency of weather, that they require more substantial and weather-proof dwellings than those living further inland."

Lieut. Jeffreys describes a Tasmanian hut as having, he says, "three pieces of timber placed in an oblique position, with their ends sunk a little into the ground, and meeting at a point at the top, where they were fastened by a cord of bark. Two of the three sides of this dwelling are then filled with wicker-work, like their canoes, and the whole is completely secured from the

inclemency of the weather by a covering of long grass." This answers to the interesting account given of a hut by M. Péron. When so harassed by the Europeans, they left off building huts, and were satisfied with breakwinds.

Dr. Mouat's account of the hut of the Mincopie of Andaman might be applied to that of our islanders :—"The tailor-bird and the beaver are architects from whom the Mincopie, if he were only observant, might obtain valuable hints for the construction and improvement of his bare little hut." The Papuans of Tasmania never attempted to raise huts on piles in the water, as their fellow-Papuans of New Guinea do, and as some of the ancient inhabitants of Switzerland, Wales, and Ireland did. They did not even raise round piles of stones, or *burgs*, as the prehistoric men of Caithness and the Orkneys did.

The French, after visiting Van Diemen's Land, explored the coast of New Holland. In Endraght Land they found huts of a hemispherical shape four or five feet high, and from six to eight in diameter, with an entrance a yard in height. Boughs were inserted in the sandy soil, and drawn together at top. The voyagers found even seaweed couches within. Captain King records some good huts on the north-west coast. On the Lynd River of North Australia some were seen storied, for fear of floods. In lat. 17½° there were large tenements in the form of a beehive, constructed of tea-tree lattice, and thatched with a sort of straw. In Queensland the *Humpys*, as they are called, are often comfortable. On the banks of the Victoria River, Major Mitchell was struck with a class of house which he thus describes: "A frame like a lean-to roof had first been erected, rafters had next been laid upon that, and thereupon thin, square portions of bark were laid like tiles." Conical huts, like those of Western Van Diemen's Land, were noticed by Mr. G. A. Robinson in the western part of Port Phillip.

BOATS.—An old convict who had lived much among the dark Tasmanians, when a *bolter* at large, told me one method of making a boat in two hours. Selecting a tree with a good barrel, the tallest man chopped round the bark as high as he could reach with a stone axe; this was a roughly sharpened stone of serpentine, phonolite, or compact basalt, inserted in a cleft stick, and bound in its position with the string of Corrijong. A waddy would then rip us a seam. The bark was

beaten to loosen it from the stem. When brought away it was laid upon the ground, flesh side uppermost, and a fire lighted upon it. Some Corrijong bark was then used to tie up the corners of each end to make the canoe. The *gin* generally sat at one end, and the children in the other, while the father paddled with a stick. The Fuegians manage the same way.

Mr. Roberts, formerly of the Bruni salt-works, described to me the mode of constructing catamarans in the channel. They were of thick bark, interlaced like a beehive with Corrijong bark string, and were strong enough not only to carry men across that stormy sea, but even on the Southern Ocean to De Witt and other islands, which were visited by the Natives on sealing excursions. The head and stern were raised high above the water like horns. Each boat would hold from four to six men. Long sticks, or spears, or bark paddles, plied first on one side, then on the other, supplied the place of oars, and propelled this rude contrivance as quickly as an English whaleboat. At each stroke the rowers uttered a loud "Ugh," like a London pavior. The boats have been known to live in very rough seas. An old whaler told me he had seen one of them go across to Witch Island, near Port Davey, in the midst of a storm. No catamarans were used on the northern side of Tasmania.

Lieut. Jeffreys saw more presentable specimens of Tasmanian skill. The Natives would select two good stems of trees and place them parallel to each other, but at a couple of yards apart. Cross pieces of small size were laid on these, and secured to the trees by straps of tough bark. A stronger cross timber of greater thickness was put about the middle. The whole was then more or less covered with wicker-work. Such a float would be thirty feet long, and would hold from six to ten persons. It could be moved on the surface of smooth water "by means of paddles, with amazing rapidity and safety."

With few navigable rivers, no village communities, and having no commerce to maintain, there was little call upon their ingenuity in this respect. They could swim over a stream, or small arm of the sea, with little difficulty, when they had no log handy. But Mr. Flinders, with all his shrewdness, failed to conceive of their ability either to swim or paddle. Finding, as he thought, no evidence of their ever visiting an island in Banks' Strait, he records this testimony: "These were corroborating

proofs that the Natives of this part of Van Diemen's Land have not the means of transporting themselves across the water, for Green Island is scarcely two cables' length from the shore."

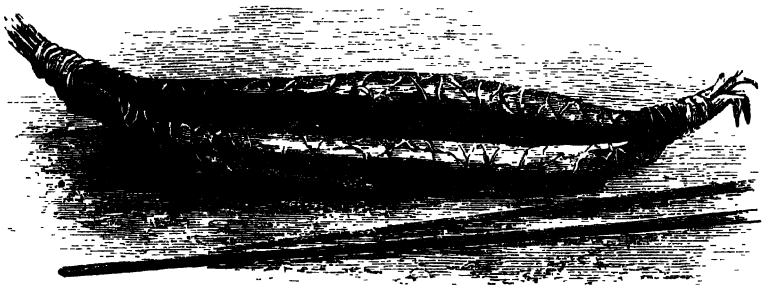
Mr. Backhouse describes the natives of Macquarie Harbour crossing on the paper-like bark of the swamp tea-tree, lashed side by side by means of tough grass. While some were seated upon the raft, one caught hold of it, and swam by its side to steady and direct it. Californian Indians were satisfied with a float of rushes, and the ancient Britons and Irish with skins. The word *canoe* was used by the natives of San Salvador.

The English tried to get the Tasmanians to abandon the narrow stick paddle, or spear, for broader and more effective oars. The naked sailors laughed at the novelty, but kept to the fashion of their fathers. The raft would sometimes be formed of decayed wood, or of a pile of bark secured by a stick. Kangaroo skin cords were good fasteners. In North-west Australia the raft is of several small poles pegged together. Captain Bligh gave the Australians credit for very strong bark canoes, thirty-three feet long, the sides of which were sewed to the bottom piece with the sinews of the kangaroo. They seldom, if ever, hollowed a tree by fire or axe. The Fuegian boat was described by Captain Bougainville as "made of bark, ill connected with rushes, and caulked with moss in the seams, in the middle of which is a little hearth of sand, where they always keep up some fire." A better one was sent to the Royal Geographical Society of London by the Governor of the Falkland Isles. It was eight feet long by twenty-two inches broad, and the same in depth, made of the bark of beech; whalebone, or a fibre of wood, stitched the pieces; and clay, with the bleached stalks of the wild celery, caulked the seams. Upon a platform of clay in the centre the fire was made.

The French were keen observers of the Tasmanian rafts. In M. Péron's work we have a sketch of one—a copy of which is here given. But the account written by Captain Freycinet is so particular, that it must be given entirely:—

"Three rolls of Eucalyptus bark form all the framework; the principal piece fourteen feet long, with a thickness of three feet—two others twelve feet long and one foot thickness only. These bundles, which taken each apart resemble the sail-yard of a vessel, were united by their extremities, that which made them

raised at the end, and constituted the whole of the canoe. The whole was made pretty solid with a sort of grass or reed. In that state the vessel had the following dimensions :— Length inside nine feet one inch, total height two feet, depth in the middle eight inches, width at end ten inches. The savages can place five or six in these canoes, but more commonly they put three or four at once. Their oars are simple pieces of wood, from seven feet eight inches to eleven and fifteen feet, with a thickness which varies from one to two inches. Sometimes, and when the water is not very deep, they serve as sticks to push upon the bottom, as we do with our hooks."



TASMANIAN BOAT (*By Péron.*

The woolly-haired Papuans everywhere have inferior boats to those of the Polynesians. The Andamaners, like the Tasmanians, propelled with long bamboos in-shore, and sent their hollowed trees along with short paddles. At Cape York, to the north-east of Australia, outriggers are used, copied from the New Guinea neighbours. Captain King saw very fair canoes of bark on the north coast, eighteen feet long. At Gregory's river Harding, to the north-west, a cork-wood raft was seen eight feet long by nine inches broad, having a cross peg near one end, to be grasped by the toe, while the paddling was performed by the hands only. Not far off, however, a better raft is made of poles pegged together. One, ten feet by four, had nine rough poles thus connected. It was propelled by the spear, which struck the water alternately on either side. Captain Sturt, with his

usual benevolence, was able to assist a wild native in boat-building. He found the man waiting to transport his family across a large river. He was hammering away at the bark of a gum-tree with a very rude stone axe. The traveller lent him an English iron hatchet, which soon did the work. Completing the canoe, the Australian placed his wife and infant in the vessel, and pushed it off the shore; then, returning the axe to its owner, he threw himself into the stream to rejoin his companions.

CHAPTER VII.

WOMEN AND CHILDREN.

THE employments of the Tasmanian women did not certainly add to their beauty, however much they tended to domestic utility. In addition to the necessary duty of looking after the children, they had to provide all food for the household, excepting that derived from the chase of the kangaroo. They climbed up trees for the opossum, delved in the ground with their sticks for yams, native bread, and nutritive roots, groped about the rocks for shell-fish, dived beneath the sea-surface for oysters, and fished for the finny tribe. In addition to this, they carried, on their frequent tramps, the household stuff in native baskets of their own manufacture. Their affectionate partners would often pile upon their burdens sundry spears and waddies not required for present service, and would command their help to rear the breakwind, and to raise the fire. They acted, moreover, as the cooks to the establishment, and were occasionally regaled, at the termination of a feast, with the leavings of their gorged masters. As an illustration of the treatment they received, the following story from a writer in 1823 is here appended:—

"One of the hunting party, who was pointed out to me as the husband of a woman who had a sucking child, returned without any prey. I supposed he had been unsuccessful, but Muskitoo (afterwards the Mosquito of Black War notoriety) told me that he had eaten his opossum in the bush. 'Then,' said I, 'what has his wife to eat?' 'Nothing.' 'Has she had any food to-day?' 'No.' 'When will she get any?' 'Not until she procures some for herself.' Indeed, the unfeeling wretch, her husband, was quite regardless of her and the children; and, although it was then past noon, and they had been without food since the preceding day, he would not trouble himself to obtain any for them. I endeavoured to make him understand that he

was a very bad man, and ought to take care of his wife and children, but he paid no attention to me. However, I persuaded one of the party to share his opossum with the woman, and was much gratified to observe that, before she ate any herself, she fed her eldest child, a little boy, about two or three years old." Labillardière, like Péron, failed in convincing husbands of the cruelty of imposing work upon the weaker one.

Our fair friends, with all their trials, including an occasional waddying from their enraged or jealous partners, were a merry, garrulous company. Like all savages, they quickly changed from smiles to tears. The names of two females of the George River tribe will illustrate this variety of emotion: Ploorana-loona, sunshine; and Taenghanootera, crying bitterly.

Beauty did appear among the Papuans of Tasmania as among the Papuans of New Guinea. Concerning the latter Mr. Kops is pleased to say: "Three of whom were young, and who, on account of their beautiful eyes, clear, white, and regular teeth, happy laughing-faces, round shoulders and arms, fine hands, beautiful bosoms, and well-formed limbs, deserved the name of beautiful, not only in the eyes of Papuans, but also in those of Europe." The gallant Mr. Long is not flattering to the black race, when he declares: "Ludicrous as the opinion may seem, I do not think that an ourang-outang husband would be any dishonour to a Hottentot female." So some have said of our islanders of the south. Péron and other voyagers could speak favourably of the charms of the daughters of Tasmania. Lieut. Jeffreys, who saw them in 1822, says of them: "These women are infinitely more interesting than those of Port Jackson. Their limbs are better proportioned, and their features far more agreeable. They are, also, more cleanly in their persons, carefully preventing their hair from growing to any great length, by cutting it with the sharp edges of two pieces of broken crystal." There would, however, be found few of the marks of beauty recognised by the Kandians of Ceylon, according to the following catalogue: "Her hair should be voluminous, like the tail of a peacock, long, reaching to the knees, and terminating in graceful curls; her eyebrows should resemble the rainbow; her eyes the blue sapphire and the petals of the blue manilla flower; her nose should be like the bill of the hawk; her lips should be bright and red, like coral, or the young leaf of the iron-tree; her teeth

should be small, regular, closely set, and like jessamine buds; her neck should be large and round, resembling the berrigodia; her chest should be capacious; her breasts firm and conical, like the yellow cocoa-nut; and her waist small, almost small enough to be clasped by the hand; her hips should be wide; her limbs tapering, the soles of her feet without any hollow; and the surface of her body in general, soft, delicate, smooth, and rounded, without the asperities of projecting bones and sinews."

Although I have no sketch of a young Tasmanian lady, I present a youthful Venus from Queensland :—

AN AUSTRALIAN BELLE

As to their nakedness, there is evidence enough that such could exist without the want of modesty, and consistently with the preservation of delicacy. Dr. C. Smith, referring to the Andaman Islanders, says: "I have seen a woman take off her clothing, and sit as unconcernedly as if she were an animal; evidently she knew not that she was naked." Dr. Livingstone found the females of the Lake Nyassa unclothed, and those of the Balonda tribe were similarly adorned, while their lords had skin

aprons before and behind. Yet though indifferent to their own absolute nudity, the girls laughed at the traveller's Makololo men, who had no back apron.

Although naked, they carefully avoided that indelicacy of attitude which would suggest their immodesty of nature. This is explained by Labillardière. "We observed with surprise," said he, "the singular posture of the women when they sit on the ground. Though for the most part they are entirely naked, it appears to be a point of decorum with these ladies, as they sit with their knees asunder, to cover with one foot what modesty bids them conceal in that situation. These people seemed to be so nearly in a state of nature, that their most trifling actions appeared to me worthy of observation." Jorgenson also has said: "The females, always in a state of nudity, would invariably, when sitting down, do so in a decent posture." Mr. Glover has preserved this fact in one of his sketches. The author of "Barrington in New South Wales," one of the earliest works on Australia, remarks the same thing, when saying: "The singular posture of the women much surprised the Europeans who first witnessed it. When they sit on the ground, although they are for the most part entirely naked, it appears to have been a point of decorum to adopt all that possible concealment which modesty would suggest among the most refined nations." Captain Snow noticed this observance with the Fuegians, saying, "They squatted down in a peculiar way." In common with many other colonists, I have noticed the same; but must admit that the old ladies at Oyster Cove were not always so particular with the disposition of their extremities.

Another mode of sitting is perceived from one of Mr. Glover's sketches,—the originals being in the possession of Mr. Hines of Melbourne.

In their personal adornments nothing elaborate was beheld. Their cleanliness, though relatively commended by Lieutenant Jeffreys, was not very conspicuous. Their chattering propensities did not make them so unlike the rest of their sex in the world. The French navigator could not possibly imagine why a girl kept on speaking to him, a foreigner, but consoled himself with the remark, "She must talk." The age of puberty, usually, but erroneously, supposed so much earlier than with white females, was from fourteen to sixteen. Mr. Protector Parker asserts:

"It is an opinion generally entertained that the native youth attain the attributes of puberty at a much earlier period than Europeans. I demur to that opinion." My learned friend, Dr. Roberton, of Manchester, has conclusively exposed that popular fallacy by citations of statistics from all parts of the world. Mr. Sale, in his translation of the "Koran," says: "The age of marriage, or of maturity, is reckoned to be fifteen—a decision supported by a tradition of the prophet." Puberty, says Davis, was from fourteen to sixteen. It was sometimes accelerated in

TASMANIAN SITTING. (*By Glover.*)

Eastern Australia by artificial means, and by natural in Western Australia.

Opinions as to the chastity of the Tasmanian native girls are not unanimous. The French naturalists spoke highly of this quality, and so have some English writers. Dr. Mouat gives the Andamaners credit for unlimited freedom before marriage, and strictness afterwards. The Brazilian Indians rather prefer a deficiency of chastity in their brides, as it is the best testimony of the value of their attractions, and so better worth the marriage fee.

This lack of stern virtue has been ascribed to savages in general, and the calumny has even been extended to the women of more civilized climes. Bundling in Wales, and the bothie system of Scotland, have furnished occasion for some slander. The chagrin of voyagers among the Papuan races generally is the best testimony to their honourable chastity. Mr. G. A. Robinson and Mr. Catechist Clark, who lived for years with the Aborigines, both declare their conviction of the modesty of the young females. It was not until marriage made them the property and slaves of man that their moral deterioration was observable; and then, perhaps, because, in the first instance, their lords have commanded the sacrifice of matronly modesty and virtue for their lordly personal advantage. Jorgenson had this good word for them: "Notwithstanding a few instances to the contrary, the aboriginal females were modest in their discourse, and discreet in their manners." Adultery was punished by blows or leg-spearing. The Moore River Blacks gave a man so many spears at his legs, but allowed the females of the tribe to sit on the adulteress, and cut her body about with flints.

While peculiar care was taken with the introduction of lads into the ranks of manhood, as with most barbarous peoples, I have not been able to satisfy myself about any rites distinctively applicable to a similar change with the other sex. Among the Indians of America, many Asiatic natives, and almost all the African races, such take place. It is not confined to religion, being observed among Pagans, Mahometans, and the Coptic and Abyssinian Christians. Where excision is practised, the ceremonies have the greatest force. On the West Coast of Africa the novice is kept three days in the sacred hut with the old women. The Rev. H. Rowley, Church of England missionary on the Zambesi, has this observation upon the Niamwali, or woman-making: "Before the ceremony the girls were light-hearted, merry creatures, but as soon as they entered upon the Niamwali they became the picture of misery." The Tasmanian women were saved these painful, and often disgusting ordeals.

Marriage has been declared the chief end of woman. The romantic associations surrounding that May-day of life, the coy delights, the anxious fears, the struggling hopes, appreciated by the ladies of the British Isles and the United States, are almost unknown in the rest of this sorrow-stricken world, but may be

realized as woman's rights are gained. While almost all over Europe it is an arrangement between parents, while almost all over the world the affair is a bargain, the Tasmanian girl could not calculate upon greater advantages than her French or Italian sister. As with them, she was often promised from infancy to some friend of the family, or to his son. So long as she was unmated, she was the property of her father, or brothers. If freed from an engagement by the death of her betrothed, or the yielding of his rights, she was open to an offer if made to, and approved of by, her natural owners. Her will was supposed to be theirs, as that of the good girl in Europe. Her affections were no more consulted than are those of the young lady in Italy, who beholds her affianced for the first time in the presence of mamma and the abbess at the nunnery school. The system is thought to have the merit of saving the girl a world of embarrassment and care; to relieve parents of their responsibilities, and to give the bride a mature guardian and counsellor through the giddy season of developing womanhood. So it was thought when Abraham sent a messenger a long way off to procure a wife for his son Isaac; and so, when the youthful Mary was espoused to the maturer Joseph. The severe laws against adultery, amounting to death in the Jewish code, and with many otherwise civilized nations, could only arise and be sanctioned under a condition of things like those in which the girl is first the property of her male relatives, and then the bargained chattel of a new proprietor.

Immediate advantage for the friends, and prospective good for the maiden, have influenced matches, alike in Europe and in Tasmania, with the educated White and the dark-minded Black. A good hunter, who could supply the larder of papa as well as of the daughter, would be esteemed as a suitor, like the heir to title and wealth, or the man of acquired possessions. But while there is little to limit the scope of parental ambition in Europe, unless it be on the score of close relationship, for which a dispensation may be purchased in some countries, and which may be overlooked in others, the Papuan tribes of Australia and Tasmania were often bound to make marital selections on the principle of the royal family of England—they must marry foreigners.

As the women of one tribe were mostly procured from another tribe, the exogamous rule could still be observed when a marriage took place within the tribe, provided the distinctiveness of origin

were proved. All sanguinous connexion would be illicit and incestuous. In the "Archæologia Americana" it is said to be "highly criminal for a man to marry a woman whose token (family name) is the same as his own." So says Mr. Buchanan in his "India:"—"A man cannot marry a woman of his own gotram" (family name). In Australia and Tasmania men were held relatives of their mothers' relatives. The South American Indians are exogamous. In India we find the endogamous system among the Hills—the marrying within the tribe; so it exists among the fishing villages of Western France, and other parts of Europe. Both systems appear in different ages of the world's history simultaneously in operation, and may be equally archaic.

A tribal or class system of intermarriage is followed on the New Holland continent by the Aborigines. At King George's Sound there are two such divisions, known as Ermung and Taaman; the children belonging to the mother's family. The Rev. C. Wilhelmi gives us this information about the Port Lincoln system of South Australia: "They are divided into two separate classes, viz. the Matteri and the Karraru. This division seems to have been introduced since time immemorial, and with a view to regulate their marriage, as no one is allowed to intermarry in their own castes, but only into the other. This distinction is kept up by the arrangement that the children belong to the caste of the mother. There are no instances of two Karrarus or two Matteris having been married together; and yet connexions of a less virtuous character, which take place between members of the same caste, do not appear to be considered incestuous." The Port Phillip, or Victoria, Blacks were equally particular; the coolie, or husband, carefully confining his selection "within prohibited degrees of consanguinity," as Mr. J. M. Allan tells us.

Without doubt the Tasmanians had drawn similar rigid lines for connubial contracts; but, as they enjoyed their free and independent life before the institution of ethnological and anthropological societies, and among colonists who were not oppressed with the claims of philosophy upon their observation and registration, I possess no sources of information so as to speak confidently of these secret usages.

The Queensland natives, fortunately for their history, are

brought before an intelligent public by intelligent writers, in this anthropological day of inquiry. Mr. C. P. Hodgson discovered that "A Moroon marries into the family of the Terroeins, and his wife is called a Terroeingan (or Kangaroo). His offspring is called Puntarau. A Terroein marries into the family of the Moroon, and his wife is called a Mooroogan. Their offspring is called a Pandur (Opossum); the Pandurs marry among themselves, and their offspring is called a Pandurchan. This last is the most numerous, and, therefore, they are content with one wife, and, perhaps, that is the reason of their increasing so fast. A large family is three or four."

That estimable missionary, the Rev. W. Ridley, M.A., has written upon this interesting subject with his usual care and lucidity. In a beautiful edition of his work, published by authority, and a copy of which was kindly sent me by the New South Wales Government, we have the following particulars of the marriage customs of the natives of Wide Bay, the Maranoo, &c. &c. He gives the four family classes of men as ippai, murri or baia, kubbi, and kumbo; and the corresponding of women as ippata, mata, kapota, and buta. Among the Kogai tribes, west of the Balonne river, the names are—urgilla and urgillagun, instead of ippai and ippata; wungo and wungogun, for murri and mata; obur and oburugun, for kubbi and kapota; unburri and unburrigun, for kumbo and buta. Nearer Moreton Bay we have baran and barangun; bundar and bundarun; bandur and bandurun; derwain and derwaingun;—*un* termination being feminine.

Mr. Ridley says: "On this division is founded the law of intermarriage. Ippa may marry kapota, or any ippata except his sister; murri may marry buta only; kubbi may marry ippata only; kumbo may marry mata only." . . . "The sons of ippai and kapota are all murri; their daughters are all mata; the children of ippai and ippata are kumbo and buta; those of murri and buta are ippai and ippata; those of kubbi and ippata are kumbo and buta; and the rest of kumbo and mata are kubbi and kapota. The effects of these rules, in passing every family through each of the four classes in as many generations, and in preventing the intermarriage of near relations, will appear," &c.

"The principles of equality and of caste," adds the clergyman, "are combined in a most singular manner. With regard

to intermarriage, the effect of the above rules is to prevent marriage with either a sister, or half-sister, an aunt, or a first cousin related both by the father's and the mother's side. For instance, kubbi's sister is kapota, his father's sister is buta, his mother's sister is mata, and he may marry none but ippata. Again, if kubbi's first cousins, the daughters of his father's brothers, are kapota; and the daughters of his mother's sisters are also kapota (the same name as his sisters); neither of these may he marry. But his first cousins, the daughters of his father's sisters (butas married to murris), are all ippata; and the daughters of his mother's brothers (murris who marry butas) are also ippata; these he may marry. Now kubbi's father's brothers may have married his mother's sisters, so that the first cousins, whom he is forbidden by law to marry, may be doubly related to him; whereas those first cousins whom he is allowed to marry cannot be related in the same manner. Lastly, kubbi's nieces are all buta and mata; therefore he cannot marry one of them."

Who can say after this that the Australians are but a step beyond the ourang-outang? The success which Mr. Ridley had in the investigation of the tribes with whom he was associated, could, without doubt, have been no less with others, had similar intelligent inquiry been made in other portions of the continent, or even among the despised Tasmanians.

The female names in Van Diemen's Land varied according to the tribe. The generic *woman* was Lowanna among the eastern tribes, Neeanta or Lowanna among the southern, and Nowaleah among the north-western. A handsome woman was Loanna eleebana or Loa niry in the east, and Loa-niré lyadywaiack in the south. A bad woman was Panubré Mabbylé. A young girl was Lowanna kaeetenna. The young woman was styled by the easterns Krotto meleetyé, and by the southerns Loalla puggana. A young wife was known as Kroatta langunya in the east, Poya lanuné in the south, and Waggapoonynurrah in the north-west. The adult woman was Pugga malleetya in the east, and Longa-tallinah in the south. The eastern Tasmanian tribes called an old woman Payanna, and the southern Nena ta poiena. The widow was recognised as Wurrawa Noattyé or Wurrawa Lowanna in the east, and as Nena tura tena in the south.

The old men, who got the best food, and held the franchise of

the tribe in their hands, managed to secure an extra supply of the prettiest girls. In an impulse of friendship, the father prospective might have promised his child, if a daughter, to his hunting mate: this, confirmed at the general camp, would be a covenant. Often have I heard the Australian young blackfellows bemoan their hard fate, and declare, "No good, the like o' that; old man him get pretty lubra." As years are honoured in the forest, only a laughing complaint is made by the young fellows. Our native bachelors may not have been so alarmed at their prospective fate as the Fijian, who knew that if he died wifeless the god Nangganangga would stop him on the road to Paradise, and dash him to pieces. This seeming injustice is not confined to opossum-eaters, and is often resented by the disappointed youth in Europe and the States. This, and its almost necessary moral consequence, have been finely expressed in the song of the wives of the Benga of West Africa, sung, of course, *sotto voce*:—

> "The old men young girls married.
> The young girls made the old men fools,
> For they loved to kiss the young men in the dark,
> Or beneath the green leaves of the plantain tree.
> The old men then threatened the young men,
> And said, 'You make us look like fools,
> But we will stab you with our knives till your blood runs forth.'
> 'O stab us, stab us,' cried the young men gladly,
> 'For then your wives will fasten up our wounds.'"

According to old authors, our dark friends of the island and the continent of New Holland were always accustomed to get their wives after the classical Sabine fashion. Even Captain Collins draws a terrible picture of the man watching for his female victim. Approaching her in the gloom of the forest, he would give her a crushing blow with his waddy, seize her by the hair of her head, and drag her off, screaming and bleeding, through the thorny thicket, to his lair in the distance. Some subsequent spearings and waddyings, on the anti-Rarey system, would tame her spirit, and silence her objections.

There is truth, as well as error, in the story. The *wife-stealing* recorded in the legend of Romans and Sabines, and forming the standard legend of all ancient nations, is the approved and orthodox mode of many peoples now. It is true that the Tasmanian and Australian lover ran off with the bride,

but not true that it was contrary to her expectations, and opposed to her wishes. The principle is one of property again. The lady belongs to one tribe, and the gentleman seeks to rob the tribe of her person, and so incurs the supposed displeasure of the parties. The word for bride-stealing in South Australia is Milla mangkondi, or force marriage. Hence we find the Wahabees of Arabia force the bride from her tent, after the terms had been agreed upon, and the cash paid; the Koles of India reverse the plan, by stealing first and paying after. The Spartans, the Persians, &c. feigned the same violence. The Picts, the Gauls, the Goths, the Saxons, the Muscovites, did so. The Tartars, Indians, Africans, Khonds, Fuegians, and Circassians do so now. The Welsh retain their horseback scuffle at a wedding. The Irish, Abyssinians, Swedes, Lithuanians, &c. have a sham fight over it still. The English cast a shoe after the bridegroom, now for luck, but once in simulated revenge. The institutes of Menu sanctioned it; and the law of Moses permitted the stealing of women in war (see Deut. xx. 14).

The whole of this subject is so admirably treated by Mr. McLennan, in his "Primitive Marriages," as to be well worthy of perusal. That gentleman observes: "No case can be cited of a primitive people among whom the seizure of brides is rendered necessary by maiden coyness." The Moravian missionary Egede has a very simple way of describing the custom among the Esquimaux. "They go," he says, "to the place where the young woman is, and carry her off by force; for, though she ever so much approve of the match, yet out of modesty she must make as if it went against the grain, and as if she was very much ruffled at it, else she would be blamed, and get an ill name, as if she had been a love-sick wench." It was much after the same fashion that a Russian woman, who had married a steady German, complained with tears to a neighbour of the little love her husband bore her: "for," added she, "he has never given me the whip once."

It is not worth while for English people to exhibit much surprise and indignation at forced marriages, when their own history furnishes so many illustrations of the same, and when we know old Mr. Grafton made a special appeal to Queen Elizabeth on behalf of her own sex, and called upon her to redress the wrongs of woman. But great as she was, and strong

in will, she never ventured upon legislative relief. The memorial of this worthy advocate of woman's rights has the following paragraph :—

"It is much to be lamented that wards are bought and sold as commonly as are beasts; and marriages are made with them that are many times very ungodly, for divers of them, being of young and tender years, are forced to judge by another man's affections, to see into another man's eyes, and say 'yea' with another man's tongue, and finally consent with another man's heart, for none of these senses be perfected to the parties in that minority."

As to *wife-stealing*, so late as 1688 the rough Highlanders, being in want of mates, followed the Tasmanian plan, with the difference of no previous agreement with the parties in question, rushed down from their hills upon the granite city of Aberdeen, and carried off by force a number of women. The old Norse word *quan-fang* denoted *wife-catching;* while the German *brut-loufti* is *bride-racing.*

Messrs. Backhouse and Walker, in their excellent account of their religious visits to the Australian colonies, relate an incident that demonstrates the fact of the rights of Tasmanian belles under some circumstances. Trigoomipoonenah had vainly sought to soften the hardened breast of the delicate Roonetya. She rejected his advances, and refused to admire his well-greased and ochred ringlets. One day as the swain was crossing a river, he was suddenly seized with illness in the sight of his inexorable charmer. She could not, with a woman's heart, permit him there to perish. Leaping into the stream, she brought him to the shore, and tenderly nursed him in his weakness. Pity gave the usual birth to love, and these twain became one flesh.

Marriages were conducted according to set rules of policy. A girl known to be at liberty would be in no want of suitors. Her parents or brothers would receive showers of smiles, and the toils of hunting would be spared by the magnificence of presents. Without doubt there were guardians in the forests of Tasmania who loved the child-woman, and might be swayed by her appeals in the choice of her master. She had a great advantage over her more civilized, and as restricted, sister, in that she was not confined within the walls of a convent seminary, nor

watched by jealous parental eyes. The Bush is a wide world for the contemplation of character, and busy tongues of matrons would tell of cousins and brothers in a neighbouring tribe, so that stranger suitors were but seldom strange.

The gentler sex are credited with some sagacity in such gentle affairs; and it must not be doubted but that in many instances our dark little lassies of the South managed to have their own way, and get the gentlemen they sought. Men, when even mercenary fathers and brothers, are to be wheedled by pouts, by tears, by endearments; a contemplated husband, when unsuitable to the lady, may be discreetly outbid by another more admired; and even an espousal has been known to be foregone in the exercise of deep diplomatic talent. Should all these schemes fail, and the dreaded match can be postponed no longer, there is still the Gretna Green road open. In this case, however, the penalties are to be braved. There is the spear of the disappointed, the spear of the guardian, the spears of the tribe whose laws are outraged. But the courageous lover may be ready to combat with the first in fair fight, and, meekly, with shield only in hand, stand to receive, and ward off, if possible, a certain legal number of spear-throws as punishment for his offence. The last refuge he had was in the advocacy of his own people. A deputation from his tribe would seek to molify the anger of those whose property had been stolen. If unsuccessful in their suit, some words would lead to war between the neighbouring clans, and so the case be judged.

An illustration of the course of procedure with Australian love-matters is so strictly applicable to the fate of sons and daughters in the isle of ferns and gum-trees, that I venture to quote it from one of my earlier colonial productions. It is a Port Phillip story. The occurrence happened in 1843, and the final conflict was witnessed by a friend of mine.

"Laloa dwelt beside the stream
That named the Goulburn tribe:
The forest belle of those who longed
To have her for their bride.

"A stranger from the Yarra side,
Young Kooin, courting came;
And soon soft looks and smiles from each
Disclosed the mutual flame.

"E'er, in the chase, the mimic fight,
Or the corrobory,
In swiftness, skill, and arms,—o'er all
He won the victory.

"And as, in ochred beauty dressed,
He sat beside the fair,
With sparkling eyes and honeyed words,
She owned a conquest there.

"He bound the white clematis wreath
Around her sable brow,
And from her rosy lips received
Love's tender lasting vow.

"Alas! the course did never yet
Run smooth to lovers true;
Such sorrows come to all alike,
Whate'er their clime or hue.

"For native customs had set forth
That Marmon should possess
This Goulburn beauty for his wife,
To charm the wilderness.

"Laloa wept, and told her love,
Beside her father's knee;
But nought could move his stern resolve,
Nor change the tribe's decree.

"To dreary gunyah of her lord,
A helpless captive led,
By many blows compelled to yield,
By waddy forced to wed;

"But faithful to her Yarra lad,
And weary of her chain,
One night she glided from her home
Her lad to find again.

"She scaled the dizzy mountain-height,
And trod the fern-tree vale,
Nor halted until Koom's ears
Had heard her love-sick tale.

"But ah! her chasing kinsmen soon
Appear in vengeance there;
And they her fainting body from
Her wounded lover tear.

"His tribe resent the cruel deed,
And bloody battle wage;
While kindred tribes on either side
In strife haste to engage.

"Laloa's head bore many blows
From Marmon and from sire,—
Yet would she no opossum get,
Nor light the evening fire;

"But sadly sit, and fondly look
Across to Kooin's home,—
And vainly seek a chance to fly,
Again with him to roam.

"An aged chief at last was moved:
He wished the fray to cease;
And so proposed a duel should
Unite the tribes in peace.

"The day arrives: and warriors
From Alps and creeks repair,
The single combat to behold,—
Their feud to settle there.

"So Marmon, full of rage and hate,
Young Kooin came to fight;
For all declared the victor there
Should claim the bride that night.

"And well they fought; but love prevailed,
For Kooin won the day;
'Midst shouts of joy, he seized his prize,
And bore his bride away."

Some fifteen years ago a particular acquaintance, who was then a widower, having passed the fearful ordeal of courtship, gave me a vivid description of that interesting process; and this account I transferred to paper at the earliest opportunity. Two years ago I had the pleasure of being most cordially welcomed to his hut among the mountains, and of being introduced to number—I forget what—and a charming piccaninny. First he told me that, if not previously engaged to a young unweaned lady, according to the fashion, the young man sought a partner from a neighbouring tribe. He would join them at a visit, and sit down at the family fire, selecting that particular hearth graced by the presence of some youthful beauty. Thus the courtship

begins, according to our authority :—" Young man sit down, very fine young man ; see one woman, very fine young woman. She look at him, say, 'Very fine young man.' He look at her, say, 'Very fine young woman.' He talk to her; she talk to him ; then plenty one talk, one day, many day. Then he say, 'I like you my wife.' She say, 'I like you my husband.' Then he say, 'You go when me ready ?' She say, 'Me go when you ready.' By and by she say, 'When you ready ?' Then she talk one woman, all the same friend. She say, 'Very nice young man, you go along him his country ?' One day, young man walk about. Two women walk about, plenty long way. Then fine young woman she take hand fine young man, run away plenty fast his own country. By and by big one angry, that young woman father. Tribe come, young man tribe. Plenty spear and boomerang. So black fellow get wife."

"No mystic Hymen knot is tied ;
No orange bloom in hair,
No ring of faith, no bridal robe
Bedeck the maiden fair.

"Her 'possum rug her only wealth,
Her wishes little more ;
Her nuptial couch the 'gunyah' shade—
Her thoughts no higher soar.

"Yet e'en that leafy bower is blest
If Love make there his stay,
And not unknown with dark tribes is
A happy wedding-day."

The great drawback to the romance of aboriginal courtship, according to the estimate of the lighter-complexioned Maiden Rose of England, is the non-appreciation of the mystery of *a kiss.* The young people of Tasmania had not even the consolation of rubbing noses, the gratification of New Zealand lovers, or sucking of the breath like Malagash. Erasmus thought kissing an English custom ; and Whitelock, Cromwell's ambassador to Sweden, was earnestly requested by Queen Christina to teach her ladies the English mode of salutation : history confesses the Englishman's gracious submission to this onerous duty.

Among the forest tribes of Malaga, with whom our Natives had doubtless some connexion formerly, the woman was allowed some chance in her life settlement. The applicant for her hand was permitted on a certain day to run for her. A distance was given to the weaker, and it was ruled that if she passed round three appointed trees before being caught, she would be set free from the importunities of the lover. It was easy to be caught,

however, if thought desirable. Among the black Aborigines of the Philippine Island—a race akin to the Tasmanians—the consent of friends can be avoided by the adoption of the following plan, in tribes which have been partially converted to Christianity :—The girl seizes the young man by the hair of his head, carries him off to the priest, and declares that she has run away with him. This removes all difficulties, and the union is effected.

Our Natives were not wholly deprived of sentiment, as some traditions show; but this could only happen when the elected husband was removed, and the guardians were unusually agreeable. A lock of hair was not an unknown present among Tasmanian maidens to some heart-chosen one of the foreign sex. It is not known whether the hair was interwoven with some network, as with the tribe of King George's Sound, and hidden by the fancy worker, till found by some painstaking lover who sought a favour from his mistress. Language attests the existence of soft attentions, for the South Australian word *kakkawornendi* means to court a young lady. The maiden's string fringe round the waist, which was severed by the husband, was known to the Murray Blacks as *Moinko.*

Polygamy, which has been so luminously defended by Mr. Orson Pratt, and by his first wife also, is too ancient and honoured an institution to be approached without due respect. Sanctioned by Scripture, and the practice of Saints in various ages, down to the "Latter Day saints" themselves, the system has not wanted advocates. Europeans, and colonists of European extraction, with the exception of those of the Salt Lake City, have preached the one-wife doctrine.

"The Tasmanians," says Dr. Milligan, "never kept more than one wife at a time." Possibly this may be the correct view of later times; but some other writers believe that, in less troubled days, a couple of ladies sometimes graced the same establishment. Labillardière was satisfied of cases of polygamy in his day, though spectacles of monogamy met his eye. Courtier-like, he hesitates to offend either side, remarking: "It would be difficult to say which was the happiest, as the most laborious of their domestic occupations devolve upon them, which perhaps might sufficiently compensate their having only a share in their husband's affections."

In a condition of society where women are in the minority, as with the rapidly-dying tribes of Australia, a system very like the Indian polyandry is begotten. It is certainly remarkable that this practice, which confers privileges upon the woman, elsewhere conceded to man, the selection of multiform mates, should have been recognised among the ancient Britons, Germans, Picts, and Medians, as well as being found among the highlands of India, the jungles of Ceylon, and the mountains of the Druses. Like as polygamy is regarded by its admirers as the antidote for prostitution, so polyandry has been supposed the necessary and moral resource of a people where men are in such excess of the other sex, and as a defence against the degrading vice of indiscriminate and illicit contact.

Our Tasmanian natives, like most other savages, have suffered from the imputation of promiscuous intercourse. Some writers have roughly described them as herding like brutes; neglecting, however, to discriminate between the animals that pair and those which do not. Some have chosen, without show of reason, to assert that primitive man followed the latter mode; as one prominent writer on the subject has said: "As among other gregarious animals, the unions of the sexes were probably in the earliest times loose, transitory, and in some degree promiscuous." Mr. McLennan regards polyandry as the first remove from the promiscuous stage. It is usual with a certain class to stigmatize all contracts with that offensive term, which are not solemnized by the priests of some faith. For many years that benevolent and right-living sect, the Quakers, laboured under this slander, because the orthodox ceremony was not followed in their marriages. But, though our savages observed no recognised form of union, beyond that of taking the girl to the wirlie with the approval of the tribe, it was, nevertheless, a marriage in the strict sense.

Fidelity to the husband was regarded as a necessary virtue, on the property grounds, and the infraction of the rules of propriety was sometimes punished in a summary manner; the gentleman himself, as usual in such matters, taking liberties which he would not sanction in his partner. Domestic *scenes* were not infrequent in the camp; and slanderous innuendos were fully as much appreciated by the sable women of Tasmania as by the more favoured of their sex in courts and *salons*. Labillardière, their chivalrous defender, would uphold their

cause in any matrimonial difficulty, as he said: "It appeared that the women were careful to avoid giving their husbands any occasion for jealousy."

When improper liberties were permitted, without the knowledge or sanction of the *Blue Beards* of the forest, it was treated as adultery, and resented accordingly. A story is told of a chief who ordered the tribe to spear the paramour before the woman's face, and then he waddied her brains out. Yet it is said, that in intercourse with white men, when some return was made, the *gin* would herself confess, confident in her security. In later times, Lady Duff Gordon's saying of the Cape Hottentot would apply to the island: "It is an honour to one of these girls to have a child by a white man."

The practice of divorce, according to Dr. Milligan, "was recognised, and acted upon, on incompatibility of disposition and habits, as well as on grosser cause given. Tasmanian lords had no difficulty, and made no scruple, about a succession of wives." There was usually some one ready to barter for the offending party, though he might have to attend to her wounds from the parting salute of her mate. If *gins* get a stroke with a waddy, they return the blow with interest by the rattle of their tongues, for they fail not to bring the artillery of the whole female population to bear upon the *brute*. Under such circumstances, as the wife even there is the property of her husband, should she be anxious for a change, it is in her power to make her company so unpleasant, at the risk of a broken head now and then, as to be packed off in a hurry as a nuisance no longer to be borne. Perhaps a liberal offer may be made for the transfer of the property; for instance, some choice emu fat, a fat kangaroo, or a choice feather for the hair. The wives in that uncommercial country were really of so inconsiderable a market value, as really to be "unprotected females." A divorce was more difficult in Luzon, where the marriage portion given at a feast by a variety of friends must be redistributed to the donors by the husband; or, as with the Tartars, when the woman, if returned, must be sent back with her dowry.

For the nonfulfilment of duties, penalties would be heavy. The following story, though relating to the Australians, is very suitable to Tasmanian circumstances. It is contained in a colonial periodical, published about forty years ago.

"A neighbour, some years ago," says the writer, "called on me to assist him to protect a black woman whom three black men were deliberately killing. I went with him to see what could be done, apprehending, however, that it was a matter touching their own laws. When we came to the scene of violence, the victim was absent, but shortly after approached, being supported by another woman. Her head and shoulders were covered with one clot of blood, which had proceeded from wounds in her head so large that I could have laid the whole forefinger in most of them; but far from complaining she used every argument she could to dissuade us from seizing the men who had beaten her, telling us, 'It was all right; I shall do, massa.' Thereupon one of the perpetrators, whom we know well, came forward, and having obtained permission, explained to us, in the presence of the woman, that she was punished for not being present when her husband died, she having abandoned him some weeks before, leaving him in the Bush. Their laws, our friend informed us, required that the undutiful wife should be punished by the dead man's relatives; and that he and the other man had given her one, two, and three blows, according to the nearness of their relationship." The same practice was in vogue among the island Natives.

Even when divorced she was by no means free, as the tribe exercised jurisdiction in the woman's affairs, and the disposal of her person. She soon came under bondage again to another man, though perhaps to a younger than her first affianced one; as the young fellows were in most instances supplied with their first partners from the overflowing establishments of their seniors, or by the grant of a cast-off bit of property. In the degenerate times of the Black War, when tribal powers were weakened, some strong-minded women appear to have made their own selection of number two or seven. My friend Truganina, in the course of her rambles with the Conciliatory Mission of Mr. G. A. Robinson, seems to have changed her partners in a free way. One of the women attached to Mr. Robinson's party actually went a distance of seventy miles from her residence to catch a husband in an alien clan. Her adventures on the road, and the accomplishment of her object, would have worked up into a capital aboriginal romance.

The widows were not placed so disadvantageously as in

India, where they are condemned to the separate state for life; for most of them got appropriated promptly by some gentleman in distress—real or imagined. But when the market was not favourable, or when the real masters in the tribe—the married lords—saw it of service to the safety of their own special preserves, such widows would, as in equatorial Africa, be devoted to the good of society. The Rev. S. H. Hagenauer, the Moravian missionary, has in a letter to me alluded to this custom among the Blacks of Victoria, as it was practically exhibited in Tasmania. "I know cases," says this devoted friend of the Natives, "where women were kept for the use of the tribes, or where married men would not permit of such marriages, for fear young men would come to their wives." It was, in fact, a system of legalized prostitution. In other cases, the male relatives made use of her as a means of raising contributions for themselves. The ugly or aged ones preserved their independence.

But this Property Question was carried out by our Blacks to an extent abhorrent to the sentiments of civilization, though not wholly beyond the knowledge of our police courts. The wife, like any other of the husband's goods and chattels, might be sold, or lent. The bachelors of the tribe, who sought the preservation of their persons from spear assaults, found the conjugal fortress by no means impregnable, when the chiefs could be so easily bribed to a transitory surrender of their claims. Has not the saying often been quoted, "Cannot a man do what he likes with his own?" At times, when disobedience to orders was accompanied by feminine pouting, a spear in the leg, or a waddy on the skull, would silence remonstrance, and teach the doctrine of submission.

But the naked savage of Tasmania merely followed a principle acknowledged and acted upon by his superiors in intellect, who, nevertheless, were quite as decided upon the matter of woman property and wife obedience. Did not the stern, patriotic, and rigidly virtuous Cato command his wife to submit to the embraces of his friend? Was it not the practice of many ancient nations? Is it not now practised by the Eimauks of Cabul, the Kandyans, with several tribes of Africa and India? Has it not been known—if travellers are to be believed, not long since permitted by custom—in the Highlands of Scotland, in Iceland, and in Lapland? Women have had to submit, because

fashion prescribed it, their husbands required it, and their early education had taught it as their duty. But such customs have their Nemesis. Although a sign of good-fellowship on the part of the husband, it was an evidence of degradation to the woman, a loss of dignity to the matron, a relaxation of the bonds of wifedom. The infraction of the laws of true chastity by force would produce naturally the disregard of its claims by inclination. A woman compelled by a brutal custom to violate the instincts of womanhood, will sooner or later revenge herself on society by voluntary debasement. The wife was with the boor of Europe, as with the savage of Tasmania, no partner of affection, but a slave to administer to the man's sensual gratifications, and do no small part in providing sustenance for himself.

Few women, especially in the later times, bore any children until they had been several years married, especially if they had any reputation for beauty. The immoral life they led, from choice as well as compulsion, operated prejudicially to their maternal instincts. The desire to maintain their influence over their husbands, to stay their partners' erratic tendency of morals, or to gain the smiles of others, operated upon the mind of the daughters of the forest as upon the fashionable *Parisienne*, or the New England lady. Without the refinements which a pseudo-civilization has brought to lessen the anxieties of a wife, the savage is not unacquainted with arts to prevent the Malthusian evil. Abortion, too, was frequently practised; and for the same reason as in Europe and Africa, to preserve elegance of figure, and save the lady the petty annoyances of maternity. The old women, by vigorously thumping upon the reclined figure of the *enceinte*, would produce the required result. The earliest colonists of Australia, in 1788, observed the same practice, and found it spoken of at Port Jackson as *meebra*. Travellers in Africa are constantly met with this destructive propensity. The long period of lactation, three years or more, and the knowledge that they will have to submit to total deprivation of conjugal rites all that time, as well as during the many months before the birth of their child, may well make it a painful struggle with women whether they shall sacrifice so much for the love of unborn offspring. While we have ladies, as well as physicians, writing upon the advantages of subduing the instincts for maternity in

AUSTRALIAN MOTHER AND CHILD

PERON'S BARA-OUROU.

(*French Exploration* 1802.)

married life, our surprise at the conduct of savage wives need not be extraordinary.

When the women did permit the work of nature to follow its due course, they experienced less inconvenience than Europeans. When the hour arrived, though seniors of their sex were with them, little or no assistance was given, unless it were the pouring of cold water upon the abdomen at particular opportunities. The navel cord was cut with a stone, and afterwards tied up with fibre, by the mother, who soon rose, well greased her little one, laid it upon soft bark, and wrapped it up in an opossum skin, or, like some Australians, deposited it in warm ashes up to its neck; or, as an old Bush roamer told me, put it among a heap of bull's wood—a soft vegetable matter—where it lay, said he, like a pig in the straw. The placenta was held in superstitious regard as with the Australians, and care taken to bury it beyond the reach of any burrowing animal. The custom of purification was somewhat after that of the twelfth of Leviticus. The language of Mr. Barrow concerning the Hottentots may be well applied to the Tasmanians: "The women when young are graceful and well made, but after the birth of the first child their breasts become flaccid and pendant, and in old age greatly distended." Mothers would sometimes throw their breasts over their shoulders out of the way, when going to engage in any employment. The Polynesian woman often does the same. An old writer says of the Queen of Madagascar: "When she sat her breasts hung down to her lap." I have repeatedly wondered at the pendulous breasts of aged Australian lubras, but those of the Tasmanian tribes were quite as shocking to one's notions of propriety and beauty.

The children, like little ones the wide world over, were amusing and interesting creatures. The kind-hearted Frenchmen of 1792 and 1802 were much pleased with them. "Every little present we made them," said one, "created delight, and increased their partiality toward us. Generally speaking, they seemed lively, arch, and ricksome. It is interesting to find, at the extremity of the globe, and in this state of social organization so rudely outlined, the self-same engaging and amiable character which with us distinguishes the first stage of life." Happy the man who could write thus! Labillardière speaks of their love of his bright buttons, and adds, "Their mothers, less

envious with respect to their own dress than that of their children, held them to us, that we might decorate them with the ornaments which we had intended for themselves." All honour to the heart of the naturalist!

The children were the objects of affection with the dark-skinned Tasmanian women, though, like everywhere else, boys were preferred to girls. Travellers speak often of the happy hours spent in frolicsome games between mother and little one. Blessed with more leisure than many European females, having less demand upon their time in needlework and household economies, the aboriginal mother gave more oversight to her naked, tumbling picaninnies. The little one was carried on the shoulders straddling, or upon the hip. Major Mitchell says of the mothers of Central Australia: "They had a mode of carrying them on the haunch, which was different from anything I had seen." The fathers, as in civilized countries, paid less heed to the prattlers, being so oppressed with the cares of life; which, however, consisted chiefly in preparing a spear, listening to a tale, lounging on the sward, or strolling after game.

The want of soft food, especially through culinary ignorance, often obliged the mother to suckle her offspring far beyond the period known in civilized countries. Big boys of from four to five years old might be seen running from play to get at their lacteal allowance. I have seen instances of this in Australia. Ermann, the Siberian traveller, saw a child six years of age thus tended among the Tungusians. The singular attachment of the Native women for their dogs greatly interfered with the proper treatment of children, and instances are recorded in which the mother has neglected her child to give sustenance to a puppy. Dr. Story gave me his experience, saying "they must have been indifferent to their offspring, for they would nurse the puppies, and be more careful of them than of their *babes*." This was one of the sad effects of their partial civilization, and may be witnessed with the Maories of New Zealand and the Indians of America. The dogs are useful in hunting, and admired as pets. I saw the old Tasmanian women surrounded by a lot of filthy mongrels, who licked out of the platter with their mistresses. Pigs have been nursed at the breasts of the Papuans of New Guinea, and Sir John Richardson saw young bears suckled by Esquimaux.

The charge of infanticide has been brought against the island Aborigines. Though this dreadful custom may not have been so prevalent as among the South Sea Islanders, so barbarous as among the ancient Carthaginians, or so inhumanly selfish as in the British manufacturing towns, where children were destroyed for the sake of the burial fees, yet we know that the crime did exist in the forests of Tasmania. The want of food for infants, the inconveniences of nomadic life, the interference with the personal charms of the wife, jealousies of other women, the arrest of their own pleasure, the disagreeables of baby life, and sometimes the desire of sparing a daughter the wretched lot of the future, were causes of infanticide. New-born infants were often buried alive with the deceased mother. Fathers, when enraged with their lubras, would occasionally snatch up and murder their child. It is sad to know that at the time of the Black War almost all the children disappeared, being killed by their friends to avoid the fate of the hunted tribes.

Families were never large with the Tasmanians any more than with their Black neighbours. Dr. Moorhouse assured me that his inquiries as Protector of the Aborigines of South Australia had brought out this result—that, while the number of births averaged between four and five, but two children were brought up by the mother. Captain Grey counted 188 children among 41 mothers in West Australia, a far higher amount than elsewhere, and much greater than at the same place now. In this respect they are unlike the African race. We read of a Negress having two hundred living descendants, and of another having thirteen children at six deliverances. The mother of many children had a distinctive name in some places; being Tukkuangki in the Adelaide tribe, and Dattulamalde at Encounter Bay, nearer Victoria.

The question also relative to the supposed inability of Tasmanian women to give birth to black children after having had children by white men, will be found discussed elsewhere, under "Physical Condition." Few, very few, cases are reported of twins in a family. The charge of killing one of twins is attached to the mother there, as well as by Apongi and many other savage tribes.

The curious superstition of mothers not looking upon a prospective son-in-law, or the latter glancing at his future mother-

in-law, is discussed in the chapter upon "Superstitions." A story is told of a man who was uncomfortable at the attentions of a gigantic bully in the tribe towards his gin, and who effectually warded off his jealousy by the engagement to give him for a future wife a newly-born daughter. The enamoured gentleman had thenceforth to keep his distance from the beautiful property.

It is delightful to acknowledge the safety of travellers in a savage land, so long as women are present. While they are in the rear, or out of sight, it is at least suspicious, if not dangerous, for the white man. Captain Snow found it so in Terra del Fuego, saying, "While the women remained I did not expect there would be any attempt to attack us." The old women were arbiters of peace and war. They urged vehemently to the charge; but should they agree to hold up their hands three times, the intended victim was spared, and peace proclaimed.

CHAPTER VIII.

GOVERNMENT AND NUMBER.

CHIEFTAINS undoubtedly did exist among the Tasmanians, though they were neither hereditary nor elective. They were, nevertheless, recognised, especially in time of war, as leaders of the tribes, and their authority of command was obeyed. After the cessation of hostilities they retired, not like Cincinnatus to a farm, but to the quietude of every-day forest life, and the equality of that democratic mode of existence which appears prevalent among all Papuan people, and some of the aboriginal tribes of India. Dampier long ago wrote of the Tasmanian's Negrillo fellow-race, "In Mindanao are black Ethiopians who own no superiors." Labillardière, when in the south of Van Diemen's Land, wrote: "They do not appear to have chiefs; each family seems to live in complete independence."

The character of chieftainship as found by Mr. Eyre in the tribes of New Holland will strictly apply to their woolly-haired friends. "The degree of distinction," says he, "in which any Native is held by his fellows, or the amount of deference that may be paid to his opinions, will in a great measure depend upon his personal strength, courage, energy, prudence, skill, and other similar qualifications." Davis, who lived so long the life of a Blackfellow, said before the Committee of Council at Brisbane, "There are no more kings and queens among them than I am Prince Albert—that is all the talk of Whites. The ablest man amongst them is the greatest."

Lieutenant Jeffreys brings forward an illustration to show that the Tasmanians, without any legitimate rulers, had a conception of dignity belonging to certain persons more than others. He says: "It has been asserted by some persons that the respective tribes of Van Diemen's Land have not any chiefs; but the more correct opinion is that there are individuals among them

to whom the others pay a kind of homage or obedience. Some time ago, a party of Bushrangers, who had run away with a Government boat, having been driven ashore by a considerable surf, fell in with a number of Natives. A person of the name of Howe had the command of the Bushrangers; and one of the Natives, perceiving by his gestures, and the conduct of the rest of the men, that Howe maintained a sort of authority over his fellows, stepped forward a little from his companions, and showed a disposition to have some personal intercourse with him, refusing, at the same time, to hold any conversation with the others. The weather abating, Howe ordered his men to drag the boat up, as it had been damaged by the surf. The Native seeing this, beckoned to his men to assist Howe's party in performing that service, but held Howe himself by the collar, intimating that, any more than himself, he should not suffer his dignity to be lessened by rendering the men any assistance in so servile a piece of labour. This anecdote sufficiently proves that the Native tribes of Van Diemen's Land do in fact observe a degree of obedience to those whom they consider to be their chiefs or heads."

The colonists of the island were more ignorant of the habits and customs of their Aborigines than were those of New Holland, in consequence of the unwillingness of the Tasmanians to hold intercourse with the Whites. Manalagana, the chief of one of the tribes, and a man of great influence from the integrity of his character and superior intelligence, was thought by many Europeans to be the king of the whole island. Among the Australians one man would get pre-eminence in the tribe, and be called its king by the settlers. Bungaree, the chief of Sydney Harbour, when taken ill, was ordered to the hospital by the Governor. But he deemed this a lowering of his dignity, knowing that it was the refuge of sick convicts. Father Therry, the benevolent priest of New South Wales, and the especial friend of the weak and defenceless, took the Black into his own house, and nursed him. But, one day, the men of the tribe came in his absence and removed the dying man to a Bush *mià mià*, where he soon expired. Contrary to usual custom, his son was nominated chief; but he rapidly drank himself to death, after the manner of his sire.

There could not have been much communion between the

tribes of the island, as Captain King, in 1819, found the western Aborigines terrified at the look of his dog, though that animal had been domesticated by others ten years before. Mr. Squier, the American traveller, has a suggestion to offer as to the multiplicity of tribes. He observes: "This separation and subdivision of the Aboriginal race, and the exclusion of its different families in respect to each other, seem rather due to long periods of time, and long-continued migrations of single nations and tribes from one portion of the continent to the other."

It would appear that the different tribes were distinguished by some marks, answering to the Totems of the Indians. The cicatrices varied somewhat for the same reason. The Oyster Bay men had a mark in the small of their backs not unlike a rude circle. Others had simply stripes in the thickest parts of the arm. Their hunting-grounds were well determined, and trespassers were liable to attack. Among the Eastern Australians such territory was called their *taorai*. Their rights of property may be described in the language of the Rev. W. Ridley: "Real and personal property in individuals are rendered impossible by their systematic communism."

No coach-and-six could be driven through their Acts of Parliament, as their laws, few but definite, were unwritten and unchangeable. Many of their customs are explained in this book. Their penal code was not a severe one. The rights of property were defended, but these related chiefly to the duty of wives. If a man broke an ordinary institution of the tribe, he might be stuck upon a tree for the jeers of men—a pillory without the rotten eggs; or he would stand to receive a certain number of spears, thrown from a given distance, and which he must avoid by his agility, if he could.

The NUMBER of the Tasmanians was never easy to ascertain. Some good authorities placed it at 7,000 once, though Mr. Melville, in his Almanack, thought it was as high as 20,000 at our arrival in the island. Mr. G. A. Robinson thought in 1832 there were but 700 alive. An old man told me that he saw 300 in one mob near the Derwent in 1820; another saw 200 at once in 1819 on Mr. Archer's run; 500 have been known to assemble at a grand hunt; Robert Jones saw 200 in 1819; and another speaks of 160 at Birch's Bay in 1825. A party of 300 tried to cut off some seamen watering at Brown's River, in 1806.

A writer in 1815 estimates the native population then at 7,000. In 1818, at Oyster Bay, 500 were seen. In October 1829 there assembled 300 near Ellenthorpe Hall, and 300 at the Tamor river. Mr. Sams, Under-Sheriff, informed me he had seen 300 together. Mr. Curr, in 1830, spoke of 400. Old Dutton told me he saw 400 in Governor Davey's time. In 1831 a roving party described "a very great number of native huts," deserted near the site of the future township of Marlborough. An approximate census of six tribes, in 1830, gave a total of 450. Jorgen Jorgenson once said that the number "may, without exaggeration, be quoted from 2,000 to 3,000 souls." Mr. Hugh Hull, the Clerk of the Tasmanian Council, to whom I am under much obligation for his courtesy when searching the records of the colony, has made out the following Table of Numbers, commencing in 1824, though he estimates there were once 7,000. Old settlers have not much belief in his figures as to early times, though public records gave him statistics for later years. His numbers by no means accord with the reports of Mr. Robinson, Mr. Batman, and other Leaders of Parties, any more than with the word of old country settlers.

1824	340	1840	58
1825	320	1841	49
1826	320	1842	51
1827	300	1847	48
1828	280	1848	38
1829	250	1854	16
1830	225	1855	15
1831	190	1857	15
1832	176	1858	14
1833	122	1859	14
1834	111	1860	11; 4 m. 7 f.
1835	111	1861	8
1836	116	1863	6
1837	97	1864	6
1838	82	1865	4 f. 1 m. whaling.
1839	68		

Their numbers were diminished by intestine wars even at the time of the Black War. When Geary took two males and one female near C. Grim, they declared that all the rest of their tribe had been destroyed one evening, when camping at their fires, by the celebrated Amazon who had united a strong force out of fragmentary tribes. Mr. Robert Clark, in a letter to me,

said: "I have gleaned from some of the Aborigines, now in their graves, that they were more numerous than the White people are aware of, but their numbers were very much thinned by a sudden attack of disease which was general among the entire population previous to the arrival of the English, entire tribes of the Natives having been swept off in the course of one or two days' illness." The discovery of a large collection of skulls and skeletons at the Break-o'-Day Plains many years ago attests to the fact of their being numerous formerly.

Many causes operated in keeping down the population of the Tasmanians, who, having been in the island for so many ages, might have been supposed so much more numerous. They were, like the Australians, scattered over a great space in feeble numbers. In no place do we find a hunting people numerous. The Indians of the forests were ever few compared to the Indians of cities. The Tartars of the nomadic kind are, similarly, a sparse population. The Arabs of the pastoral regions are much fewer than those of the central and more civilized portion. Though, without doubt, a longer period has passed with the Tasmanians in their hunting state than with any known people in a pastoral or agricultural condition, yet their numbers, doubtless, never greatly exceeded the few thousands we found in the island.

The Native women, as a rule, had very few children, and fewer still were, from abortion or infanticide, permitted to live. Apart from the long suckling, for three, or even four years, the period during which their powers of reproduction existed was much shorter than with Europeans. Very few of them had children after thirty-five years of age, and the majority, perhaps, were barren before thirty. Children were difficult to rear, less from the exposure of climate than unsuitability of food, harassment of travel, annoyance to parents, and the absence of effective remedies under disease. Fearful epidemics, common in all uncivilized or semi-civilized countries, would make serious inroads upon a population, and check any possible increase.

The Tasmanians, again, were bound by that law of primitive society which is ever a great barrier to increase—the young girls were given to the old men. Were virtue the rule, barrenness would follow. But, where the husband could command the virtue of his wife, and dispose of it to purchasers, or have it on

loan to friends, a low state of morality would exist. As with loose females in civilization, increase would thus be prevented. Again, young wives repressed the natural yearnings for maternity, in order to gratify their passions, administer to their vanity, or retain influence over their husbands, and did not permit the natural course of events until age was approaching, and the sphere of such labours was contracted.

For such reasons, apart from their conflicts with the Whites and the physical evils of contact with the other race, the Tasmanians were never numerous.

CHAPTER IX.

DISEASE.

THERE are strong reasons to believe that, before their connexion with the Whites, the Aborigines were a healthy, as well as a happy people. Epidemics, affecting alike the civilized and the uncivilized, occasionally spread havoc among them: thus, Mr. Catechist Clark was informed by the Natives, when at Flinders Island, that, before the English ships arrived in Sullivan's Cove, a sudden and fearful mortality took place among the tribes. It was viewed as the premonition of a dreadful calamity affecting the race. Such an impression appears to have dwelt upon the Mexican mind before the advent of the Spaniards.

Old Ward, who came in the first convict-ship, told me that in the early times the Natives were a fine healthy race, and not a cripple could be seen among them. In the *Hobart Town Gazette* of 1826 a notice appears of a visit paid to the Governor by a party of wild Blacks from the interior; and it is added, "They appear to be of more noble stature than those who visit the town occasionally, and are free from cutaneous eruption."

Scorbutic diseases were very common among them, though the French, in 1792, saw nothing of the kind. The Rev. Mr. Horton, in 1823, refers to this, and remarks: "It is, perhaps, occasioned by their extreme distress and exposure to the weather. I observed that the fronts of their legs, which, in the manner they seat themselves round the fire, are mostly exposed to its heat, were most disfigured by this dreadful eruption." It often assumed the type of leprosy. Thus, we are informed by an old record that "Black Kit, Queen of Black Tom's tribe, has died of the leprosy."

In the *Gazette* of April 1826 there is an account of the trial of two Natives for murder, in which it is affirmed that one, the elder, was so covered with leprosy, as to be kept apart from all

in the court. A sort of catarrh now and then spread among the people, as in 1827. Most of those who died in captivity were affected by consumption: the lungs were ever the weak part of their frame. Rheumatism might be expected to trouble those who camp on damp ground with inadequate covering.

The evils induced by communication with our own countrymen were pitiful indeed. Indulgence in strong drink not only produced quarrels and murders in the tribes, not only destroyed the bonds of affection between husband and wife, parent and child, but, by inducing a recklessness of habit, by unwonted exposure, and by direct alcoholic action, brought serious diseases on this unhappy people. Well might an indignant writer in the *Sydney Gazette* of 1822 thus give utterance to his feelings concerning those giving "intoxicating draughts unto the poor wretched creatures." "Oh! Europeans," cries he, "have mercy upon the harmless Aboriginal, and then the Deity may extend mercy unto you."

The introduction of the physical curse of civilization is well attested. A report was forwarded to Government of the loathsome condition of the women at Bruni, in consequence of the vicinity of whaling parties and splitters. The same cry was heard from all parts of the country; and we can in some part excuse the ferocity of that vengeance which fell upon the troublers of the forest tribes. It is no apology to refer to the conduct of the men who were willing to prostitute their lubras for drink. It is rather a matter which should fill us with reproach as a civilized people, that, by our enslaving their appetites to liquor, we broke down their last sense of shame and honour. When hunted down in the war, being so driven about, their sufferings in the Bush from this disorder were a terrible aggravation of their miseries. A friend told me that at that time he saw a child at the breast in large holes from crawling over its diseased mother. The Government never appeared to think it its duty to provide them with medical aid. It is a noticeable fact that, among the Andaman islanders, who would have no connexion with Whites, Dr. Mouat found neither gonorrhœa nor syphilis. Well may the benevolent Daniel Wheeler exclaim, "How dreadful and appalling the consideration, that the intercourse of distant nations should have entailed

upon these poor, untutored islanders a curse unprecedented and unheard of in the annals of history."

The Natives were not without some cures for their various complaints, though not so advanced in medical skill as their Maori neighbours. Bleeding with flints relieved inflammations, and assuaged the pains of rheumatism, &c. They called it "letting out the pain." Truganina, finding her husband in much pain from a swollen thigh, made six deep incisions, which produced much sloughing, and cured him in nine days. Tight bandages, kept wet, relieved pain in the head and stomach. The Mesembryanthemum, or Pig-face, with other herbs, were employed as purgatives. A bath in salt water, or the application of ashes to the skin, was the prescription for cutaneous affections. Drinking plentifully of cold water, and then lying by a fire, acted as a wet sheet for promoting perspiration. Alum was an important article in their pharmacopœia. Shampooing, especially with the utterance of favourite charms, was held efficacious in various disorders. Cold water was sprinkled on the body in cases of fevers. A decoction of certain leaves was applied to alleviate acute pain. Ashes were used for syphilitic sores, and the oil of the Mutton-bird for rheumatism. Blood was staunched in severe wounds with clay and leaves, while women constantly poured water over the part. Leaves of the Ziera (Stink-wood) worn round the head relieved pain. Magnetism, in gentle friction of the limbs, was applied, and passes used. The urine of females was a specific.

Other means of a more questionable character were employed. The ashes of a burnt body were thought to charm away suffering. Soft whisperings of magical words reached the ear of the believing invalid. The blood of another was often employed as a healing draught. Human bones were attached to the part affected as a certain alleviative. Mr. Woodward saw a big fellow with three leg bones about his head, he being sick with a severe headache. A child's skull hung round the neck was considered of great virtue. It is known that they had their doctors, like the Australian natives, with wonderful power to eradicate disease by dint of hard sucking of the spot under pain, in the process of which a small bone or stone, the cause of the disorder, would be extracted from the body, or exhibited as being such.

Some of the cures effected by the Australian doctors are remarkable. They will set a broken bone and place the limb in a socket, well bandaged. One replaced a man's bowels, gummed up the fissure, crossed leaves for a plaster, and soon cured the patient. Some used friction on the navel and other parts, and employed emulsions for mollifying purposes.

Their escape from the effects of disease, when they lived in independence, may be owing to a cause described by Professor Waitz. "The great vital energy of savages," he observes, "compared with civilized nations, is shown by the relatively greater healing power of nature (*vis medicatrix naturæ*) possessed by the former." In the previous work, under the heading of "Decline," the question of the rapid disappearance of the Aborigines after their association with the Whites has been dwelt upon. That nameless something—commonly like the consumption of Europe—or described by others as the mysterious effect of contact with a superior race, is removing the Blacks from all the southern shores. Mr. Oldfield, the naturalist, states that, of thirteen visitors to Murchison River from Shark's Bay, twelve died of consumption in three months. This was the fell destroyer of the Tasmanian people on Flinders Island.

Mr. G. A. Robinson, Conciliator of the Tasmanians, has this report upon one cause of disease: "It is my opinion," he wrote, "that the inhabitants of this island suffer much from mental irritation. Various circumstances produce this effect; and though the deaths of the Aborigines at Flinders Island may be ascribed to other causes, as catarrh, inflammation, &c., still it will be found that mental irritation accelerated, if not the disease, the sufferings of the patient, and, in too many cases, has proved fatal. When the Aborigine is first affected, either from cold or otherwise, he immediately desponds, refuses natural sustenance, and gives himself up to grief: mental irritation follows, and at length he dies in a state of delirium. And I think I am borne out in my opinion by the sudden dissolution of the wife after the death of her husband, although at the time she may be in apparent health; and that of the husband after the decease of the wife."

CHAPTER X.

BURIAL.

DEATH caused sorrow in the wretched breakwind of the Aborigines. Their camp, as with the Australians and the aboriginal Stiens of Annam, was suddenly broken up with a cry of distress. The women, who had, according to the loving instincts of their sex, tended the sick with kindness, watched by the corpse until the hour of burial.

The funeral obsequies were not upon the Egyptian style of grandeur. Their "City of the Dead" was no stereotype of the life of the living, as in the Necropolis of the Etruscans, nor did it display the gaudy trappings of a frivolous fashion, as in the doll-dressed walks of *Père la Chaise*. Dr. Milligan, late Protector of the Tasmanians, gives this description of their ways of treating the dead :—

"With respect to the burial of the dead, some of the tribes were in the habit of burning the remains, in which cases the remains were sometimes taken up very carefully, and carried about as an amulet, to ward off sickness, and to ensure success in hunting and in war. Other tribes placed their dead in hollow trees, surrounded with implements of the chase and war, building them in with pieces of wood gathered in the neighbourhood; while others would look out for natural graves, made by the upturn of large trees, and there deposit the bodies of their dead."

The various modes in use among their neighbours of the continent of New Holland may be briefly mentioned. The body is burnt—placed in a hollow tree—laid upon a stage supported by four rude posts—thrown on the top of the thick-branched Banksia (Native Honeysuckle), or Exocarpus (Native

Cherry-tree)—buried with knee and chin together—carried about by women till putrefaction leaves bones only in the net—or laid aside in scrub or hollow tree till the skeleton is fit to be buried. Some of the Gipp's Land Blacks mutilate their dead, preserving bony parts as relics, and interring only the bowels and fleshy parts. Formerly, in Port Jackson, the body was put adrift in the bay in a bark canoe. In Encounter Bay, the old were buried, the middle-aged placed in a tree, and young infants burnt.

The body of the deceased Tasmanian was usually placed in a sitting posture, the knees bent upward, as with the Indians, the Kaffirs, the Andamaners, the Caribs, the ancient Scotch and Irish, Society Islanders, the Scandinavians, &c. The Peruvian mummies in the sandy slopes of the Pacific are seen thus bowed together. The small-statured primitive race of the Cave of Aurignac, in the Sub-Pyrenees, whose skeleton fragments lie reposing on the remains of extinct forms of life, evidently so buried their dead. A fence of brushwood was often fixed round the Tasmanian grave, or a rude hut, as at Guichen Bay, built over the remains. Occasionally a mound was raised. Without adequate means for digging a large hole, though with their sticks the Natives pursued the wombat in its burrowings, there would be only a little earth and leaves, or grass, spread over the corpse. The scratchings of beasts and the washings of watercourses often revealed the skeletons to the passers-by. In some graves the head was missing, that having been retained as a relic by some loving friend. They did not put pipeclay masks of the head upon the grave, as the Australians of the Lachlan and Darling rivers do now.

By far the most extensive account of a Tasmanian tomb is in the narrative of the French expedition, in 1802, by M. Péron. That agreeable sentimentalist, who had drunk deeply of the romantic school of Rousseau, &c., was overcome with emotion at the grave of a savage islander.

"Under the shade of some old casuarinas," he says, "was raised a cone, chiefly formed of bark of trees, planted in the ground at the lower part, and united at their summits by a large band of the same substance." Moving a part of this pyramidal structure, "in the bottom was found a large flattened cone, formed of a fine and light grass, disposed with much care in

concentric and very deep beds. My interest grew with my uncertainty. Eight little switches of wood, crossed at the top of the cone of verdure, served to hold it down: each of these switches had its two ends stuck in the ground, and were themselves fixed therein by the application of a great stone of flattened granite. All these precautions gave me the hope of some important discovery. I was not deceived. Hardly had I raised some of the upper beds of turf, when I perceived a great heap of white cinders, and which appeared to have been carefully replaced. I plunged my hand into the midst of these cinders. I felt something which resisted very strongly. I sought to draw it forth. It was the jaw of a man, to which some fragments of flesh still hung. A sentiment of horror penetrated me. Yet, on reflecting a little upon all that which I had observed in the composition of the monument, I could not help experiencing sensations very different to those I had had at first: this verdure, these flowers, these protecting trees, this deep bed of young grass which covered up again the cinders,—all united in convincing me that I had discovered a tomb.

"As soon as I raised the cinders, I perceived very black charcoal, swollen, friable, and light: I recognised animal carbon. At the same instant I withdrew a portion of a femur with some fragments of flesh; one could still distinguish the stems of large vessels filled with a calcined blood, reduced to the state where that fluid approaches a resinous substance. To these first bones succeeded others not less recognisable—vertebræ, fragments of humerus, tibia, bones of tarsus, &c.; all were profoundly altered by the fire, and were easily reduced to powder. I possess myself of several *débris*, with portions of burnt flesh which adhered to them. These bones were not found, as I at first believed, simply placed upon the surface of the earth; they were all situated at the bottom of a circular hole of fifteen to eighteen inches diameter, at eight to ten inches in depth."

He then continues: "Other ideas developed in me new meditations. I asked myself, 'What could have been the origin of that custom to burn the dead?' Isolated from the rest of the universe, thrust even to the extremities of the world, the inhabitants of these borders have not been able to receive it by communication with some other people: it is, then, incontestibly their own. But why, in that case, have they adopted it? Why

preserve it in preference to all others? This preference, is it a simple effect of chance? or did there exist some physical reason dependent on the same nature of things, and of the particular mode of social organization of these men, which could have determined this usage, and which could still preserve it?" He then discusses the question. To abandon the body?—that would freeze one with horror. To throw it into the sea?—the current would bring it back again. To bury it?—the soil is too hard for their weapons to pierce. What then remains?—he concludes, "The last means is to burn the body."

TASMANIAN GRAVES. (*By Péron.*)

In Oyster Bay, on the eastern side, Péron found bones and cinders in the grass of a mound. On the bark covering it, he says, "they had deeply engraved some characters analogous to those which the Natives employed in the tattooing of their arms."

The burial of the dead in sequestered places is more agreeable to natural feelings than interment in crowded, public, consecrated ground. One of the most charming retreats I ever knew

devoted to such solemn purposes was in South Australia, in a sweet valley on the Murray side of the range. It was, indeed, a leafy grove, provided with walks carefully swept by the dark children of the dead. Major Mitchell thus described a similar spot in the interior of Australia:—"A fairy little spot, in the midst of a scrub of drooping acacias. It was extensive, and laid out in walks, which were narrow and smooth, as if intended only for 'sprites;' and they meandered in gracefully-curved lines, among the heaps of reddish earth, which contrasted finely with the acacias and dark casuarinæ around." At Mount Napier, in his "Australia Felix," he found the grave of a child. The tender mother had filled a hollow with leaves and feathers, and bent down some branches over, with their stems in the soil beside the grave. Upon the raised earth near the Lachlan River the relatives have put casts or masks of clay, to imitate the faces of mourners. On the Clarence River pretentious circles of stone are reared, with a slab in the middle.

Had Péron returned after the settlement of Van Diemen's Land, and the contact of the two races, he would not have found the fantastically-adorned sepulchres, nor grown sentimental over some recent grave. Few things so indicate a deficiency of feeling, or a coarse, animal nature, as indifference to the remains of the departed. The wretched Apingi of Africa are content without graves, and will throw out their dead for the jackals to devour. The deterioration of the Tasmanians appeared simultaneously with their negligence in burials. We cannot avoid feeling kindly towards a people who paid such respect to their lost and dear ones as did the Egyptians and Etrurians of old.

The system of cremation alluded to by M. Péron is one of the most ancient in the world. We find proof of its existence with the primitive peoples even of the Stone Age. The Norsemen often burnt the bodies of leaders in boats. The Greeks and Romans, some thought, adopted it to save the occupation of the ground. It is more likely that the "funeral urns" of civilization were the successors of more humble appliances belonging to more savage ancestors. A relation is supposed between the worship of the sun and this mode of burial; though critics have condemned Moore's treatment of the body of the fire-worshipper. The Siamese are in the habit of burning the bodies of all but pregnant women, though they first cut off some of the soft flesh,

and throw it to the dogs and vultures about. At the pile these words are repeated in an ancient language:—

> "Ah! mortal is the body: as now
> Ascends this smoke,
> So may thy spirit ascend to heaven."

With the Sikkims of Central Africa only the bodies of the rich are burnt, the rest being buried; though their neighbours, the Thibetians, more often indulge in cutting the corpse to pieces, leaving some parts on the hill-tops for kites and crows, and throwing the rest into deep mountain-lakes. Most of the Black Indian relatives of the Tasmanians still burn bodies. At Mount Gambier, of South Australia, the ashes of the dead were collected from the hollow tree in which the body was placed for consumption.

Colonel Collins witnessed the ceremony at Port Jackson some seventy years ago. Bennilong, the chief, erected a pile of wood three feet high, on which he placed the body of his wife, covered with grass, and by the side of which was a native basket containing female ornaments and work. The husband set fire to the pile. The next day he came, accompanied by some of his friends, collected the ashes of the deceased, dug a hole, and interred the remains. Covering these up with earth, he put some branches on the top, and then large sheets of bark upon these. With the Tasmanians of the southern parts of the island the fire would often be got ready before the breath was gone, so anxious were they to consume the body immediately upon decease. The ashes were sometimes, as with the Sandwich Islanders, cast upon the ocean waters; but more frequently were collected and carried about by the friends in their wanderings, and as preservatives against evil.

Mr. Jorgen Jorgenson thus speaks of a Tasmanian cemetery, which he saw when engaged with a party pursuing the Aborigines:—

"In passing slowly down the western side of the Shannon, Mungo, our black guide, arrested our attention. He conducted us to a number of large rocks, some projecting a considerable distance over the gully below, and extremely difficult of access. Under one of these projecting rocks we found a species of cave, where Mungo pointed to a heap of flagstones, round which were

placed, in a very compact manner, pieces of gum-bark, the whole appearing altogether as a small pyramid. This was a grave, and in the middle of it was deposited a spear, pointed to the depth of two feet, and the upper end of it pointed with a human bone. We opened the grave with our bayonets, and, in so doing, we met with several layers of flat stones, placed in such a manner, that an English resurrection-man would find it more difficult to open one of those graves than most in one of our graveyards. At the bottom we found some human bones, which, from the state they were in, clearly indicated that they had for a long time remained in the grave. After examining the grave with its contents, we again placed everything as we had found it, and covered the grave, in like manner, with the stones and the gum-bark, so as to avoid giving offence to Mungo, who did not behold unmoved our sacrilegious invasion of the silent and solemn repository of one of his countrymen, whom he described as a great warrior from the circumstances of his burial. When I asked Mungo the reason of the spear being stuck in the tomb, he replied quietly, "To fight with when he is asleep."

The grief for relatives exhibits an amiable feature in the character of the Aborigines. A friend of mine mentioned that, for many days after the removal of a Native, he had observed the friends of the deceased assemble at sunrise, chant the death-song, and weep abundantly with each other. Mr. Backhouse, the Quaker traveller, was present at one funeral scene in Van Diemen's Land, and bears witness to the tenderness and affection of the bereaved. He describes the deep emotion produced by the singing of the death-songs, and noticed the furrows which flowing tears made among the ashes on the face, which had been spread as the insignia of woe. As a demonstration of the intensity of sorrow, the name of the deceased, from delicacy to the feelings of the survivors, was never mentioned again.

The affectionate nature of woman appeared on such melancholy occasions. Plastering their shaven heads with pipeclay, and covering their faces with a mixture of charcoal and emu fat, or mutton-bird grease, the women not only wept, but lacerated their bodies with sharp shells and stones, even burning their thighs with a firestick. Flowers would be thrown on the grave, and trees entwined to cover their beloved ones. The hair cut off

in grief was thrown upon the mound. Homer refers to a similar custom 3,000 years ago :—

> "Next these a melancholy band appear;
> Amidst lay dead Patroclus on the bier;
> O'er all the corse their scattered locks they threw."

Such customs are also mentioned in the Bible : Lev. xix. 28, xxi. 5 ; Ezek. xxvii. 30—32 ; Jer. xlviii. 37 ; Rev. xviii. 19. Often would the mother bear about with her the bones of her child, and the widow some such memorial of her husband ; as, among the Fuegians and Andamaners, widows may be seen with the skull of their deceased partner suspended from their necks.

CHAPTER XI.

PHYSICAL APPEARANCE.

THE Tasmanian natives, though somewhat resembling their neighbours, the Australians, had their points of difference, especially in the character of their hair. But as distinguishing them from other races of the world, uniformity of opinion can hardly be expected. Several of the early voyagers, as may be seen in the beginning of my previous work, "The Last of the Tasmanians," expressed a favourable view of their *physique*. The reader can form his own impression from an inspection of the illustrations in the book. Our own countrymen would not esteem them models of beauty, though some might have recognised with pleasure the grace of their movements.

While Dr. Nott, of America, calls them "the worst impressions of the most inferior grades of humanity," Captain King esteemed them "stouter and better proportioned than those of New South Wales;" concerning whom Dr. Pickering, in his "Races of Man," is pleased to say, "I would refer to an Australian as the finest model of the human proportions I have ever met with in muscular development." M. Maury, of the French Academy, condemns the whole of the Papuans, to which class our Aborigines belonged. "The Papuans," he declares, "present a vicious conformation; their extremities are badly formed, the knees crooked, their tibias often bent outward." Captain Freycinet sees that "they differ essentially from all other peoples known." Dr. Knox, the ethnologist, has a similar impression, for he is convinced that "the whole shape of the skeleton differs from ours." Count Strzelecki, the Polish traveller and *savant*, observes: "Compared with the negro, he (the Tasmanian) is swifter in his movements, and in his gait more graceful."

To show that opinions will differ, two men looked upon the race the same year (1828), and had different impressions. The

one, a missionary, was shocked at the caricature of humanity; the other, a man of literature, saw something to admire. The Rev. Mr. Horton says: "What I have seen and heard of the original inhabitants of Van Diemen's Land convinces me that they are in every respect the most destitute and wretched portion of the human family. Indeed, the shape of their bodies is almost the only mark by which one can recognise them as fellow-men; and were it not for the force of other evidence besides that which their condition and habits present to the mind of the beholder, I should without hesitancy affirm that they are a race of beings altogether distinct from ourselves, and class them amongst the inferior species of irrational animals."

When we find a missionary entertaining such prejudices, we are not surprised to learn, in the history of this unhappy people, that no one cared for their souls.

The benevolent and public-spirited Dr. Ross, editor of the *Hobart Town Courier*, was disposed from the first to cherish a kind sentiment toward them; and, during the whole of his useful life, he never ceased raising his voice on their behalf, and never lost his faith in them. Of the first tribe he met, in 1823, he tells us: "We could not help admiring their upright and even elegant gait, which would be a pattern to any Bond Street lounger. Their air of independence was quite charming."

My own first impressions of the people were favourable. Several youths had been brought to my house, nearly thirty years ago, by their friend the Catechist of Flinders Island. Dressed in European clothes, clean in person, healthy in appearance, cheerful and smiling, with flashing dark eyes, and expressive features, they arrested my attention and won my regard. When, after a lapse of nearly eighteen years, I was brought in contact with the whole of the race then alive but one absent individual, and beheld them sunken in morals, advanced in years, and hopelessly hastening to extinction as a people, my estimate of their physical appearance declined, as my sympathy for their condition increased. The youth had gone to the grave, and the hideous aspect of degraded and miserable old age chilled and shocked me.

Yet tastes may differ, as the following amusing sketch will show. It is taken from the *Launceston Advertiser* of February 1829:—

"Through the assistance of our interpreter, we shall occasionally be enabled to give our readers some interesting extracts from a pile of aboriginal records, which was captured from the Blacks in a late skirmish under Ben Lomond. These curious manuscripts are upon square sheets of bark, and every bark is neatly bound together with kangaroo sinews. The letters, or characters, appear to be indelibly written with some exceedingly powerful acid, which acts upon wood in the same way as aqua-fortis does upon copper. One of the most interesting works is 'The Travels of Bunga Mudjah amongst the White Savages.'

"As a specimen of Mr. Bunga Mudjah's opinion, we will give, for the information of our readers, the following translated extract:—

"'The men and women of every class and description are so hideously frightful, as to be compelled to spread covering over themselves from head to foot, in order to hide their ugliness: and so extremely jealous are the men of the affections of their wives, on account of the superiority of symmetry and beauty of countenance in a black man, that they always obliged me, before I entered their villages, to cover myself in the same preposterous manner as themselves. But, poor devils! they had little to fear from me; for, setting aside the ordinary appearance of the women, their extreme indolence or laziness alone would have prevented my eloping with them into the woods, as to my certain knowledge, in all my travels amongst them, I never saw one climb a tree for an opossum.'"

But, for the better understanding of this subject, it will be well to select various divisions, as presented by the *physique* of the Natives.

The COLOUR makes the most obvious distinction between them and ourselves.

Some would agree with Captain Bligh, that, what with soot, charcoal, and grease, it is "difficult to see what they are like." Thus is it with the Fuegians, pronounced black by some, copper-coloured by Admiral Fitzroy, and dark brown by Captain Snow. Dr. Anderson, with Captain Cook, described the Tasmanians as "dull black, and not quite so deep as that of the African negroes." Dr. Milligan, the Protector of our Aborigines, calls them dark brown, or nearly black. The whitish streaks noticed on their persons arise from scurvy marks on the dark skin. Protector

Parker says of his Port Phillip Blacks, whom he considers to be lighter than the Tasmanians: "I never met with one to whose complexion the word black could be readily applied. The most usual colour is chocolate-brown." Mr. Angas, the artist, talks of "a purplish copper tint." Mr. Jardine found the colour increase in lightness as he advanced northward in Queensland, till, near Cape York, a copper colour prevailed.

The prejudice against them on account of colour was as strong as against the sons of Africa. With the convict servants they were always called "Niggers." From Aristotle's time the sun has been regarded as the cause of this difference. The Song of Solomon has the same thought: "Look not upon me, because I am black, because the sun hath looked upon me." And Mrs. Somerville justifies the argument in showing the climatic advantage, when saying: "The black skins of the natives of tropical countries absorb more heat than fair skins; but, from some unknown cause, the black skin is protected from a degree of heat that would blister a fair one." And yet the latitude of 43° S., especially where exposed to a rough westerly gale, or a cold blast from the iceberg region to the south, can hardly, on this theory, be favourable for a black people. Nor ought the snows of the Polar seas to be tenanted by a darker race than some dwelling on the sweltering plains of Mexico, any more than the frigid waters of Fuego, in 56° S., by a people many degrees blacker than the Indians of the tropical Amazons. Again, in Asia, the shores of the Arctic have a darker population than the sun land of Siam; while whitish tribes are known in the Sahara of Africa, and light-brown islanders swim in the equatorial Pacific.

Philosophers are so puzzled with theories, that a reference to the ancient Book of Enoch, now so venerated by some Eastern Christians, may be excused. A tradition is there cited, that once upon a time a white cow sprang from the earth, and assumed the form of human nature. She gave birth to three other cows, which also became of our race, and gave birth to three men—the fathers of the earth's humanity—of whom one was white, the second red, the third black. We are also informed, upon the same authority, that Noah's colour was flesh-like, white and red, and that his hair was white and long.

Mr. Marsden, in his work on Sumatra, distinctly affirms that

"difference in colour in different inhabitants of the earth is not the immediate effect of climate." Humboldt thought it depended very little on man's "geographical position." Dr. Morton says: "It is a common opinion that climate alone is capable of producing all those diversities of complexion, so remarkable in the human races." The Abbé Domenech, the interesting writer upon the "Deserts of North America," &c., has this word upon it: "To imagine that God created men of different colours, because these colours are better suited to the different parts of the world they inhabit, is far more unnatural than to suppose that He gave to human nature the power to conform to, and acclimatize itself in, every country in the world." And yet the Jews of Cochin, in India, at least for fourteen centuries there, were described by Sir William Denison before an English audience, "as white as any of these here present." The negroes have been 200 years in North America, and the Dutch 300 in Africa, without a change of colour.

Malpighi referred it to the difference of the *rete mucosum*—the mucous membrane of reticular texture. Albinus showed that the coloured substance was but continuous membrane. Cruikshank and Gaultier would have four layers between the cuticle and the true skin in the Blacks. Flourens speaks of four, beside the pigment. He found the mucous membrane underlying the pigment only in the negro; but found neither pigment nor mucous membrane in Whites. Dr. Gordon could observe no *rete mucosum* in Whites. The German anatomists, Heule and Schwann, fancy that the outer integument does not consist of continuous membrane, but of several layers of cells, and different parts not so clearly distinguished as supposed. They found polygonal cells, one two-hundredth of an inch thick, containing pigment. Dr. Bachman assures his readers that "microscopic anatomy has recently very satisfactorily proved that the colour of the skin exists in the epidermis only." Kölliker contends that the epidermis is only coloured in coloured races. Lastly, we have Dr. Draper in his Physiology saying: "I believe that the coloration of the skin, whatever the particular tint may be, tawny-yellow, olive-red, or black, is connected with the manner in which the liver is discharging its functions." Foissac thought the blackness was owing to the excess of carbon in the blood of natives living chiefly upon vegetable food. But while the Irish-

man grew white on the potato, the Tasmanian was black on flesh. Julius Firmicus was confounded in his day with the received astronomical argument for the origin of colour, and he asks: "If the Moon makes men white,—Mars, red,—and Saturn, black, how comes it that in Ethiopia all are born black,—in Germany, white,—and in Thrace, red?"

History affords us little light. The walls of the ancient Pharaohs exhibit the differences of white, red, and black, existing in full force some two or three hundred years only after the reputed chronological recommencement of the existence of the human race from one family only. With so ancient a people as the Tasmanians black, and the most distant historical people of a dark colour, it is not surprising that Dr. Prichard, Dr. John Hunter, and other great authorities, regarded the progenitors of our race as Blacks.

Our Aborigines of Van Diemen's Land were not cleanly in their persons, though modest in their deportment. The women, who dived for oysters, or waded for other shell-fish, got a bath; and all parties would in summer indulge in an occasional swim. But, as for washing, they did not appreciate its necessity. The Hindoo highlanders of the Neilgherries fancy their gods would resent with lightning the impiety of a scrubbing. The Chinese write of their aboriginal race, the Ylen clan: "They were a very dirty stinking people, and never washed themselves." As with the Indians of America, a wash disturbed the paint of the Natives, and gave needless trouble. The grease and charcoal preserved their skins from cold and heat.

The *Nakedness* of the Tasmanians seemed both shocking and senseless. Captain Bligh was struck by it in 1788. Judge Barron Field told the Sydney Philosophical Society in 1824: "They are the only savages in the world who cannot feel or know that they are naked." Of course in the depth of winter they had the opossum or kangaroo rug of sewn skins; but these were not placed on their persons from motives of modesty; for, like the Fuegians, they shifted the garment as the wind blew. Dobritzhopper tells us that the Abipones of South America "cover those parts which may be exposed, and bare those which modesty commands to be concealed." When Major Mitchell the explorer met with his Australian beauty by the Murrumbidgee, she was walking with a matting at her back, but nothing

in front, and was not ashamed of his presence. Mr. Wallace, in his "Amazons," says of some Indians: "The wives of the father and his two sons were perfectly naked, and were, moreover, apparently quite unconscious of the fact." Father Carliof, visiting Congo in the seventeenth century, was not a little distressed when, said he, "they brought me a handsome young black woman stark naked to be baptized." The dirt-eaters of Orinoco wear a three-inch bandage of bark, which is useless for modesty.

Dr. Milligan remarks: "They wear no clothing whatever, except in case of illness, when a kangaroo skin was put on, with the fur inward, laced together in a way to fit the body." Dr. Leichhardt was by no means displeased with the nakedness of the Aborigines of the continent; and ventures to say: "Is it fancy? but I am far more pleased in seeing the naked body of the blackfellow than of the white man." Of course they would put a piece of native string round their loins, as a means of suspending their waddies; but which, as Dr. de Roches says of the Loyalty Islanders' *ficelle*, "does not give an atom of heat, nor a centimetre of shade." The Louisiade islanders, of the kindred race to Tasmania, are more decent, as they put a large leaf between the thighs. The following reflections came to the mind of Dr. Ross after his ramble near the Shannon, where he saw a native group enjoying themselves: "What a host of supervacaneous tinkers, tailors, dressmakers, shoemakers, bottle-blowers, shopkeepers, storekeepers, and manufacturers of all sorts of things, are thrown into the shade by these aboriginal ladies and gentlemen!" The Wataturu of Africa, according to Mr. Speke, "despise any one who is weak enough to cover his person, considering that he does so to conceal his natural imperfections."

A French traveller, being asked by a Parisian lady about the dress of the Tasmanian cousins in New Caledonia, replied: "Madam, with a pair of gloves you could clothe six men." Not so long ago an impression prevailed that the use of clothes was the evidence of an unconverted nature, and the Adamites of Holland took off their clothes at Sunday service, till a whipping through the streets in their regenerate appearance restored them to civilized opinions. After all there is some sound sense in the remarks of Captain Snow, who remained some time among

the Fuegians: "We like to be clothed. They do not; preferring the greater freedom which absence from all external covering to their bodies gives them. More harm, I think, is done by false modesty—by covering and partly covering—than by the truth in nature always appearing as it is. Intermingling with savages of wild lands who do not clothe gives one, I believe, less impure and sensual feelings than the merely mixing with society of a higher kind."

The HAIR is the most remarkable feature of any in the physical appearance of the Tasmanians. As the illustrations will testify, the hair hangs in corkscrew appendages about the men's faces, and has a crisp, woolly look. For the latter reason it is that they have been called negroes by some ethnologists, though Mr. Jukes thinks the frizzle different from that of the negro. Unlike the negro, again, the Tasmanian had a down over the surface of his body, with much hair on the breast, arms, and thighs. The females presented a woolly aspect. This led Dr. Milligan to say, when referring to the hair: "The women burn it; and if they fall in with pieces of glass bottles, they shave it very close, tying a narrow bandage about their heads just above their ears. They consider that being so docked adds to their beauty; and that is, in fact, the cause of a woolly appearance in the females." Some men have longer ringlets than others. At Cape Portland some were seen with hair down to the shoulder. The dandies paid great attention to their curls.

But the aboriginal hair is not woolly, nor like that of the negro. One of the best living anatomists, Dr. Pruner Bey, has written so lucidly upon the nature of negro hair that his opinion may be cited:—

"The hair of the negro," he asserts, "is not cylindrical. Transversal sections show that its circumference is always an ellipse; the large diameter exceeds the small diameter by $\frac{1}{3}$ to $\frac{3}{5}$. What is, moreover, remarkable is, that the large diameter, examined in different sections, does not remain parallel to itself, so that the summits of these small ellipses, instead of being disposed in a straight line, describe around the hair two spiral curves. It is to this disposition that the crisp state of the hair of the negro is due. With regard to the elementary microscopic stratum, the hair of the negro differs from that of other races only by its medullary portion. The central medullary and

WAPPERTY, A TASMANIAN WOMAN

(*Photographed by* MR. WOOLLEY OF HOBART TOWN.)

PATTY, THE RING-TAILED OPOSSUM.

(*Photographed by* MR. WOOLLEY.)

aëriferous canal which is clearly seen in hair with elliptic circumference, and of which some traces are found in the cylindrical hair of Turanians, is absent in the negro." The eccentrically elliptical hair is found naturally to twist, like the Tasmanian hair, into corkscrew locks.

This learned physiologist examined some Tasmanian hair in 1863, and left these notes: "Two specimens from Van Diemen's Land—one black, the other yellowish-white—approach the hair of the New Irelanders by their tresses, their diameters, and internal dispositions. Diameters of the black hairs = 25 to 15; of the light hair 25 to 15 and 27 to 20. The first has no medullary substance, the second has it much enlarged." The New Irelanders belong to a kindred race, but have their hair more frizzled than the others, with a larger mixture of lighter-coloured hair. Some of them there cut their hair short, and cover it with a dirty, thick, gelatinous substance, leaving, too, a white ring round the head.

To show the relation of the Tasmanian hair to others, it may be stated that, while in its diameters of the ellipse it was found to be as 25 to 15, the Negro was as 20 to 12; the Fiji, 35 to 20; Malay, 22 to 15; Muniong, 30 to 25; and the New Zealand, 24 to 18. That of the Chinese was found as 33 to 24, and the Indian Chatos 25 to 20. The Arab, Persian, and Hindoo were more elongated ellipses; a Brahmin's being 22 to 14. The Mongolian generally was nearly circular, and therefore not ready to curl. The Malay's was between a circle and an oval. The Peruvian mummy's was 25 to 23. The most elongated was some hair from the body of the celebrated Hottentot Venus, of a remarkably curly sort, whose diameters were as 20 to 10.

Liebig, the chemist, has given us the relations of fair, brown, and black hair, as to their several constituents. He found the fair hair to contain, out of 100 parts, 49·34 of carbon, 17·94 of hydrogen, and 26·14 of oxygen and sulphur. The brown hair had 50·62 of the first, 17·94 of the second, and 24·83 of the third. The black hair consisted of 49·93 of carbon, 17·94 of hydrogen, and 25·50 of oxygen and sulphur.

While no medullary substance was found in the black Tasmanian hair, it was equally absent in that from the New Guinea Papuan. The colour of both is doubtless affected by the

mixtures laid upon the hair; the lime turns the ends, at least, of some of the Papuan hair to a reddish hue. The red or yellow ochre overlaid upon the head, though always mixed with animal fat, gave a red or yellow appearance to the locks. The material served the office of red precipitate in more civilized communities, to remove a certain entomological difficulty.

Our islanders had not the development conspicuous on the heads of Fijians and other of the Black races of the Pacific and Indian Archipelago, which may be seen two feet in diameter; nor did they trim and cut it so fancifully as the Torres Straits Islanders. They did not plait the woolly material as many Africans do. But the men's heads were well covered with their massive, stiff, curly locks. Domremy de Rienzi, who speaks upon the authority of the French voyagers, says: "Their hair is as crisp as those of the Papoues, and even a little woolly;" and again, when alluding to their mode of head-cracking in quarrels, and their stick-breaking across head instead of knee, he mentions that "their hair formed a cushion which lessened pressure, and made it less painful upon the top of the head than upon any other part of the body."

The general character of the Papuan hair is described by Dr. Pruner Bey as being in small, round tufts, and implanted perpendicularly. These tufts in the Papuan hair get removed, said Mr. Earle, by mixture with the brown race; the Semangs and natives of New Ireland, Solomon's Isles, &c. have tufted hair. Mr. Consul Pritchard notices the spiral separate tufts of the Fijian; but shows that the spiral character is the result of custom. A few hairs are wound round the fine ribs of a cocoanut leaf, and the ends are tied with strips of native cloth. In Tanna the small locks are twisted round the rind of a plant, and hang down like strings. Some of the New Guinea ringlets hang down a foot long, the separate tufts forming these spiral tresses. The tufts in their beard and on their body are farther apart than those on the head. Some Papuans make huge wigs by inserting the ends of the hair into caps made of matting. It is certainly very remarkable that some of the most ancient idols of India have woolly hair. In the Vedas it is written: "The hair of Buddha shoots forth in little ringlets."

Dr. Milligan observes that the hair of the Aborigines of Tasmania is usually "growing remarkably low upon the forehead,

and extending down in both sexes in the shape of a whisker." The appearance of the last, supposed masculine, feature struck me particularly upon the merry face of that ancient beauty, Truganina. Both sexes had the body more or less covered with a downy hair; the men showed a mass of soft curly hair on the thighs and breast. The negro, on the contrary, has no down on the body, and but few hairs on the pubes and armpits. The growth of hair on the Tasmanian forehead was quite Grecian, and would be envied by some belles of the present day.

The women cut their hair very close. In a tribe near the centre of Australia the men also do so. Dr. Mouat saw the Andamaner females shave off the hair from the bodies of men. With the Passes tribe of the Amazons the women wear their hair, while the men cut theirs close. The Papuans of the Admiralty Isles remove the hair by means of volcanic glass. The Tasmanian women, like many of their Australian sisters, practised depilation. The Queensland lubra manages to remove the hair from the pubes, by the clever periodical management of a fire-stick applied to the roots. This is often presented to a lover as a keepsake, or exchanged as a memorial of affection. The Indians pluck it from their bodies, because they will not be like hogs. Their females so remove it from the pubes. The Uaupés eradicate it from their eyebrows, armpits, and pubes.

The Tasmanian hair was black. Van Amringe says that seven-tenths of human hair consists of black pile. Pritchard considers that the original *pile* of man was black, but Buffon thought it white. Black hairs are not so abundant as those of other colour. Dr. Peter Browne found, in the same relative space, 147 black hairs to 162 of brown, and 182 of blonde. The downy hair of the Tasmanians, called by them *lanugo*, was very thick. Their hair did not furcate, or divide at the superior extremity, like that of the negro's will often do, giving it the hog-bristle look. The eastern tribes called hair *Poinglyenna*, and the southern, *Poietélongwinne*. But when matted duly with grease and ochre, it was known as *Poinghana* and *Poina*. Their corkscrew ringlets were termed *Powingarootelecbana* in the east, *Poeena* in the south, and *Poenghana* in the west. They did not cut off the hair and make wigs of it, as the same race near Cape York.

Our early English navigators were puzzled with the Papuan

hair. Dr. Forster, Captain Cook's companion, has this account of the cause of its character. "Each hair," said he, "is found to be extremely thin, and proceeding from a root or bulk, remarkably smaller than that observed in other human hair—on this account it is called woolly; and its remarkable thinness arises from a too copious perspiration, which carries off likewise many humours, otherwise secreted for the express nutriment and growth of the hair: where the perspiration is not so considerable, it can only crisp and blacken the hair, but not to such a degree as to make it woolly." Coming to another island, he observes: "Yet they never have woolly hair, because they frequently rub their hair and head with cocoa-nut oil, which hinders the too copious perspiration."

Dr. Peter Browne, of Philadelphia, who divides the hair into cylindrical or straight, oval or flowing, and eccentrically elliptical or frizzled, says the last pierces the epidermis at right angles instead of at an acute angle. Observation led him to perceive that hybrids, or half-castes, are no new variety, as he discovered such to possess either the same hair of one parent, or perfect filaments answering to both parents on different parts of the head.

The EYES struck M. Marion as being small; but this doubtless arose from the general barbarian custom of looking shyly and peeringly at strangers, as well as from the people's massive, shaggy brows. Mr. R. H. Davis describes the Tasmanian eyes as "dark, wild, and strongly expressive of the passions." Others are struck with the brilliancy and Italian suggestiveness of those organs. The white is far from being so clear as in the European. The iris is always dark-coloured. There is a touching melancholy about their eyes when in repose, which strikingly contrasts with their intense energy and power in excitement. The children always attracted strangers from their interesting expression of sight. The lighting up of the wonderful eyes of Truganina at the remembrance of her youthful days strongly impressed me at the time.

The MOUTH had a great width. The lips, though full, had not the negro dimensions. Dr. Milligan says they were "slightly thickened." The jaws were strongly set; though the chin was inferior to the civilized races, and, in the women particularly, very small and retreating. The lower jaw projected, according

to Dr. Anderson. Labillardière noticed that in the child it so projected, but advanced to the same line with the other in mature life. Dr. Pickering will have it that it is "an error to suppose it prognathous like the negro." But Dumoutier's plates give the jaw a projection; Mr. Glover's drawings assert the same; and some Natives whom I have seen in the island very strongly exhibited their lower jaw. One defect in the lower jaw, denoting feebleness of intellect, is manifested to an extreme degree, even to the almost total absence of chin. Mr. Laing is complimentary enough to say that in the aboriginal Scotchman "the narrowness of the ape-like palate is equal to that of the lowest specimens of the negro and Australian races."

The NOSE possessed neither the grace of the Greek nor the dignity of the Roman. It was as peculiar as the *button-end* of the Brougham type. The physiologist Dumoutier calls it "prodigiously developed;" for, though not longitudinally extended, its latitude was considerable. The nostrils were exceedingly wide and full. The terminus, though usually something of the pug, had, especially with the females, a slight tendency to the *retroussé*. The great peculiarity, though not absolutely confined to that people, lay in the depression of the commencement of the organ, giving the feature much of a pyramidal character. Dr. Forster, in Cook's Voyages, noticed it in the Papuan Mallicolli, as "being from the root of the nose more depressed backward than in any of the other races of mankind which we had formerly seen." The naturalists Messrs. Quoy and Gaimard have a similar account of the Papuan. "One other character," they say, "not less remarkable still, is a depression of the bone of the nose, which makes that organ appear as flattened at its root; a singular resemblance with that of the ourang-outang. By that disposition the bones of the eye-sockets, already very protuberate, appear still more so. The nose itself is very thick and flat." An inspection of the photograph of Patty, the Ring-tailed Opossum, will make the matter clearer to the reader.

The nose on the mainland of New Holland is of the same character. In most cases, especially toward the north, the septum is pierced, and a piece of stick or bamboo thrust in for ornament. The Keri-Keri of Central Australia have long noses. At the M'Dougal range of the centre, also, the nose is not of the broad, flat kind.

The EARS were not flat like the monkey's, nor enlarged like those of the Brazilian Botucudos; neither were they with an oblong slit, as in the Easter Islanders. They were also far from being small, projecting, and mean-looking, as in the ordinary negro.

The TEETH were large and powerful; so much so, as to be in the people a decided peculiarity. Their strength was tested in the straightening of the wood for spears. The remarks of Mr. Pardoe, Melbourne dentist, upon the teeth of the Australians, apply to the Tasmanians: "Large crowns, thickly covered by enamel—more so than Europeans. The fangs not so deeply seated in alveolar, nor does the epiphysis of maxillary bone come so high as in Europe. The gums are much thicker, and make up this loss." Their colour was a clear white, which moved the French voyagers to envy. A few of the Natives had defective teeth, from the constant use of shellfish; but the majority were possessed of magnificent masticatory organs. In this respect, again, were they like the old forest race of Scotland. Some Tasmanian teeth are observed in the skulls of our museums to be much worn. In one case, at the College of Surgeons, I saw them worn down to the very stumps. Decayed teeth were uncommon. Mr. Ronald Gunn, in forwarding a skull to the College of Surgeons, sends this description: "The contiguous parts of the second bicuspis and first molar of the left upper jaw are decayed, which is a rare circumstance in this race." On another, in the same museum, is this statement: "This skull is remarkable for having but three inferior incisors." Of a female it is written: "The same variety of the inferior incisors, and the same absence of any trace of the previous existence of the missing one." Dr. Jeanneret accounts for the soundness and size of their teeth from constant and vigorous employment on hard and tough material. He regards the teeth of the civilized as wanting in bony matter inside, even if the outside be sound. The Natives' teeth were filled with good bony material within. Civilization would appear to be an enemy to teeth. The conical form of the canine teeth is said to be better developed in the Papuan than any other people. There is a tendency in the incisors to get rounded, and more like the rest. Dr. Lund noticed that the ancient man of Brazil, who once lived with now extinct animals, had his molars and incisors nearly

QUEENSLAND NATIVE

alike. Thus has it been discovered with mummies. The incisors of the old people of Kent's Cavern, Torquay, were well ground. After comparing the teeth of Tasmanians with those of Europeans, we are reminded of Sir Thomas Mitchell's opinion. "If the naturalist," says he, "looks a savage in the mouth, he finds ivory teeth, a clean tongue, and sweet breath; but in the mouth of a white specimen of similar, or indeed less, age, it is ten to one he would discover only impurity and decay." The Tasmanians did not part with two front teeth, like their neighbours of New South Wales. The teeth are perfect at the Mackenzie River, Cape York, the Darling, and Port Darwin. Two were out at Eyre's Creek, and one at the Paroo, and to the north-west.

I have great pleasure in submitting to the attention of the anthropological student the following remarks from the learned Dr. Paul Topinard, of Paris. That gentleman has been for some time paying especial attention to investigations upon the human face, as illustrated in the crania of various types of man. His work, when completed, judging by this fragment, will be most important to science. The manuscript so nobly contributed for the use of the present book on the Tasmanians has been faithfully copied:—

MESURES CRANIOMÉTRIQUES (*en millimètres*).

	TASMANIENS No 7								Australiens No. 10.	Bas Bretons No. 13.
	1	2	3	4	5	Moyenne	6	7	Moyenne	Moyenne
Projection verticale maxima de la tête (crâne et face)	192	...	183	...	...	187·5	171	...	188·0	188·8
Crane.										
Circonférence antéro-posterieure verticale (A) — Partie cérébrale du frontal	115	115	113	110	102	111·0	119	110	107·2	115·9
,, pariétale	133	130	130	126	128	129·4	110	120	126·7	126·9
,, occipitale superieure	52	45	60	58	57	55·4	52	60	62·9	65·6
,, cérebelleuse	65	64	52	60	...	60·2	52	...	51·7	53·8
Longueur du trou occipital	34	37	32	33	...	34·0	32	...	35·5	36·0
Distance du *point basilaire* au *point sus-orbitaire* (G)	116	111	108	106	...	110·2	105	...	110·8	110·0
Total	515	502	495	493	...	501·0	470	...	502·0	508·2
Circonference transverse (B) — Courbe sus-auriculo bregmatique (C)	310	295	296	293	286	296·0	282	296	283·4	307·6
Diametre transverse bi-sus-auriculaire	129	124	126	116	124	123·8	117	126	111·6	125·1
Total	439	419	422	409	410	419·8	399	422	395·0	432·7
Diamètre antéro-posterieur maximum (D)	191	187	176	179	174	181·4	177	187	180·9	187·3
,, transverse maximum (E)	149	139	140·5	139·5	131	139·8	132	134·5	131·5	145·2
Projection verticale maxima, moins la hauteur des condyles occipitaux (F)	132	..	127	125	...	128·0	118	...	131·6	128·3
Rapport de la circonférence B à la circonference A = 100	85·24	83·46	85·25	82·96	...	84·23	84·89	...	78·68	85·14
,, du diametre E au diametre D = 100 (indice céphalique)	78·01	74·33	79·83	77·94	75·28	77·07	74·57	71·92	72·64	77·51
,, de la projection F au diamètre D = 100	69·11	...	72·15	69·82	...	70·36	66·66	...	72·74	68·49
Partie de la circonference horizontale maxima *anterieure* à la courbe C	255	247	236	237	236	242·2	238	258	235·0	242·0
Diamètre transverse frontal inferieur ou minimum	93	95	94·5	90	90	92·4	94·5	95	94·3	95·4
,, ,, ,, ,, maximum	116	115	115	109	107	112·4	107	113	108·1	121·0
Partie de la circonférence horizontale maxima *postérieure* à la courbe C	315	287	272	237	262	275·8	276	257	267·5	285·3
Diamètre transverse occipital maximum	113	105	121	105	104	109·6	103	110	105·8	113·0
Diamètre antéro-postérieur iniaque	193	187	174	176	171	180·2	177	186	175·0	181·5
Diametre transverse du trou occipital	31	28	30	29	...	29·5	26	...	29·7	30·5
Angle dit de Camper	75°	76·5°	71°	75°	...	74·1	80°	74°	71·0	75·3
Capacite de la cavité crânienne (en centimètres cubes)	1520	1424	1332	1255	...	1382·7	1103	...	...	... *

* La moyenne de 384 crânes Parisiens de M. Broca est de 1457

MESURES CRANIOMÉTRIQUES (*continued*).

FACE.	TASMANIENS No 7.								Australiens No. 10.	Bas Bretons No. 13.
	1	2	3	4	5	Moyenne	6	7	Moyenne	Moyenne
Distance du point basilaire au point sus-orbitaire (G)	116	111	108	106	...	110·2	105	...	110·8	110 0
,, ,, ,, à la racine du nez	100	98	96	93	...	96·7	103	...	97 3	100 0
,, ,, ,, au point sous-nasal	102	93	100	94	...	97 2	93	...	93 3	92 2
,, ,, ,, ,, alvéolaire supérieur	103	96	105	99	...	100 7	95	...	100·2	94·7
,, ,, ,, ,, mentonnier (H)	117 5	...	118	...	...	117 7	99	...	106 6	111·0
,, ,, sus-orbitaire à la racine du nez	20	20	17	16	18	18 2	19	19	19·3	15 6
,, ,, ,, au point alvéolaire superieur	89	81	78	79	...	81 7	80	98	85	87 8
,, ,, ,, ,, mentonnier (I)	138	...	120	...	...	129 0	120	...	127 5	135 3
Diamètre transversal ou bi-zygomatique maximum (J)	140 5	131 5	132	123	123	130 0	124	136	126 6	129 4
Angle sus-orbito-mentonnier formé au point basilaire par les distances G et H	72°	...	64°	...	...	68 2	72°	...	76·0	76·0
Rapport du diamètre transverse maximum de la face ou diametre J à sa plus grande hauteur ou distance I = à 100	101 8	...	110 0	...	...	100·07	103·4	...	99·29	95·63
Intervalle des orbites	25	22	25	21	21	22 8	21	24	22·3	22·7
Profondeur de l'échancrure de la racine du nez (K)	10	05	06	07	...	07·0	07	04	...	...
Hauteur des orbites	30	32	25	31	29	29 4	31	38	32·3	32 0
Largeur ,, ,,	39	41	38	37	37	38 4	37	41	40·5	393
Saillie du rebord orbitaire supérieur au-dessus de l'*inférieur*	+11	+11	+04	+03	...	+07 2	+06	00	*—·01	...
Largeur des deux os propres du nez	13	10	11	09	...	10 7	07	08	10 0	12 6
Longueur ,, ,, ,, (sur la ligne médiane)	16	14	10	17	...	14·2	13 5	19	17 0	23 2
Distance de la racine du nez au point sous-nasal	51	51	43	49	42	47 2	45	60	49·5	53 0
Largeur du maxillaire supérieur	70	63	70	61	65	65 8	59	61 5	63 0	59·2
Hauteur ,, ,, ou distance du point alvéolaire supérieur *au point sous-nasal*	14	13	18	19	...	16 0	14	19	16 2	17 6
Largeur du maxillaire inférieur (aux angles)	95	...	92	...	...	93 5	92	...	95 7	98·8
Hauteur ,, ,, (sur la ligne médiane	29	...	32	...	...	30 5	25	...	31 2	32·2
,, de sa branche postérieure	50	...	52	...	...	51	39	...	57 7	61·1
									4 Australiens	1 negre du Soudan
Prognathisme facial	14	12	23	17	...	16·5	12	...	22·5	26
,, alvéolaire superieur	02	04	04	06	...	04	04	...	10	14

* Le signe — indique que c'est au contraire le bord orbitaire inferieur qui dépasse l'inférieur chez ces Australiens.

"Le tableau comprend d'abord 7 crânes de Tasmaniens réunis au Muséum de Paris, qui se partagent naturellement en 3 groupes : le premier renferme 5 crânes d'hommes d'un type semblable et bien évidemment de même race, la sixième colonne en donne les moyennes. Le second groupe se réduit à un crâne de femme qui offre les mêmes caractères, mais atténués, et quelques différences. Le troisième groupe concerne un crâne d'homme d'un aspect tout différent, et qui doit être un métis. Puis viennent dans un but de comparaison les moyennes de 10 Australiens (9 hommes et 1 femme) et de 13 Bretons (tous hommes). Quelque soin qu'on prenne dans ses mensurations, il existe en effet toujours des différences entre les résultats obtenus par deux observateurs, et je ne crois de rigoureusement comparables que les mesures issues d'une même main.

"Pour l'intelligence de ce tableau je me borne à rappeler que, 1°. le point sus-orbitaire est situé au milieu du prolongement antérieur, du plan de séparation du crâne et de la face ; 2°. le point sous-nasal est placé à la base de l'épine nasale antérieure ; 3°. le point alvéolaire supérieur est le point médian le plus déclive du bord alvéolaire supérieur ; 4°. le point mentonnier occupe le milieu du bord inférieur du maxillaire inférieur ; 5°. enfin le point basilaire est placé au bord antérieur du trou occipital.

"Les traits principaux des 5 premiers crânes d'hommes Tasmaniens, outre ceux que fournit l'étude comparée des mesures ci-dessus, sont : 1°. L'effacement des bosses frontales ; 2°. l'absence sur la ligne médiane du frontal de toute crête ou saillie antéro-postérieure rappellant ce qu'on observe chez certains Mélanésiens ; 3°. le développement considérable des bosses pariétales ; 4°. une disposition singulière de la région intermédiaire aux bosses pariétales, peut-être spéciale à la race Tasmanienne. Sur le milieu, de la fontanelle antérieure à la fontanelle postérieure, règne une crête antéro-postérieure de 3 ou 4 centimètres de largeur, légèrement déprimée à l'endroit de la suture bi-pariétale ; le relief en est exagéré par la présence sur ses côtés d'un sillon également antéro-postérieur, en sorte que la crête médiane, les sillons latéraux et les bosses pariétales donnent lieu au sommet du crâne à l'aspect ci-contre très-accusé sur le No. 1, et plus ou moins sensible sur les 6 autres. 5°. L'absence d'Inion ou protubérance occipitale externe et son remplacement par une saillie large, ovale, à contours indécis, ou par une exagération énorme de la ligne courbe demi-circulaire (No. 3). Les 5 premier crânes d'ailleurs offrent une conformation régulière et ordinaire, soit qu'on les considère par en haut, par le côté ou par l'arrière. Leur forme générale est celle d'un ovoïde régulier, à grosse extrémité postérieure—cette extrémité très-forte proportionnellement sur le No. 2 —à diamètre transversal maximum au niveau des bosses pariétales. Leurs parois sont très-épaisses, leur capacité très-inférieure à celle

des 384 crânes Parisiens de M. Broca, leur indice céphalique moyen de 77·07, etc. etc.

"La face donne plus de caractères distinctifs. Les premiers qu'on constate sont la brièveté absolue et relative de sa hauteur par suite du raccourcissement de toutes les parties comprises entre la racine du nez et le menton, et l'accroissement absolu et relatif de sa largeur par suite surtout de l'augmentation du diamètre transverse du maxillaire supérieur. L'indice facial, c'est-à-dire le rapport de la plus grande largeur à la plus grande longueur ramenée à 100 est de 100·07, tandis que celui des Australiens est de 99, et celui des Bretons de 95. Mais le caractère le plus frappant est l'exubérance énorme qu'affecte la région sus-orbitaire (glabelle, saillies sourcillières et bord orbitaire supérieur) qui s'avance au-dessus du nez et des orbites à la façon d'une voûte; les résultats en sont nombreux. Au milieu, la face inférieure de la glabelle crée à la racine du nez une profonde et étroite échancrure, dont le versant inférieur est formé par les os propres brusquement relevés. La figure ci-jointe représente cette disposition sur le No. 1, de profil. *a* est le point sus-orbitaire, *b* le sommet de la glabelle, *b c* sa face inférieure qui se porte en arrière sous un angle de 30°, *c d e* les os propres du nez, et *d f* la mesure de l'échancrure indiquée au tableau. Sur les côtés, le bord orbitaire supérieur surplombe sur l'inférieur et le dépasse de 8 à 9 millimètres en moyenne dans son tiers interne, et de 6 à 7 millimètres de même dans son tiers externe; de plus il rétrécit l'orifice orbitaire donnant à la cavité une apparence de grande profondeur. Sous ce rapport le No. 3 a beaucoup de cachet. Ses orbites petits, enfoncés, parallélogrammes, à diamètre transversal très-allongé et séparés par l'échancrure du nez, ont un aspect sombre.

"L'inclinaison de la face et des alvéoles supérieures sur l'axe horizontal de la tête,—c'est-à-dire le prognathisme—constituant avec la disposition mousse ou en gouttière du bord inférieur de l'orifice nasal antérieur l'un des points d'infériorité de certaines races, je ne l'ai pas négligée. Pour le terme de comparaison j'ai pris 4 Australiens au hasard et un nègre du Soudan. Bref, à mon avis, aucun des 6 premiers crânes ne sont réellement prognathes de la face ou des alvéoles, le mauvais état des dents ne m'a pas permis de mesurer le prognathisme dentaire. Quant à l'orifice nasal, son bord inférieur est tranchant, net, sur les Nos. 2, 3 et 6, et à peine émoussé sur les Nos. 1 et 4. Un mot seulement sur les dents. Elles sont fort usées, comme si le sujet de son vivant avait habituellement trituré des aliments très-durs, le No. 3 en a même un grand nombre de cassées ou de fêlées.

"La femme No. 6 a le même type, mais une tête plus petite, des os moins épais, un indice céphalique franchement dolichocéphale, un angle de Camper plus ouvert, des régions sus-orbitaires peu saillantes, des formes plus fines, plus gracieuses, etc. etc.

"Le métis No. 7 enfin rappelle le type des 6 crânes précédents par la configuration générale du crâne, mais s'en écarte par la hauteur plus grande de la face, le peu de développement des régions sus-orbitaires, le défaut de surplomb du bord orbitaire supérieur sur l'inférieur, l'évasement de la racine du nez, la grandeur en tous sens de l'orifice des orbites, la longueur du nez et la disposition très-marquée *en gouttière* du bord inférieur de l'orifice nasal.

"Je me permettrai une réflexion en terminant. A en juger par les 6 crânes d'un type homogène que j'ai étudiés, je suis disposé à conclure que les Tasmaniens sont d'une organisation supérieure à celle des Australiens, leurs voisins, et qu'ils n'ont rien dans leur crâne qui les rapproche du nègre proprement dit."

Subsequently, Dr. Topinard sent me a sketch of the part of the nose forming such a peculiarity with the Tasmanians. As it is mathematically more correct than the one forwarded with the first letter, I have had it copied. It is taken from a profile of a skull he showed me in the Jardin des Plantes. His descriptions are annexed.

PROFIL RIGOUREUX.

Their hands were delicate in structure, and small in size, having long, tapering fingers and beautiful nails, that European exquisites might envy. These possessed great facility, and

even nervousness, of movement. The palms were narrow. Their grasp could never have equalled that of our own race. In the character of their hand the Tasmanians approached that of the Italian, Hindoo, and many savage peoples. The hand of conquest, the hand for work, the hand of power, must be sought for in the big-handed Englishman and German. The inferior organization attends the so-called lady's hand. Small-handed were the Scots and Irish of fighting days of old, whose swords and daggers are fitted only for the hands of women now.

The legs were stouter and more firmly built than those of the New Hollander. M. Péron writes, however: "Their thighs were generally muscular, but at the same time almost every one has the extremities slender, long, and weak." Some have considered their limbs, like those of negroes, rather longer than the European. In old age the legs presented a stick-like appearance; otherwise Count Strzelecki's opinion of their "strong legs" stands true. The feet were somewhat flat and broad, wanting the delicate heel and high instep of advanced civilization. Their habit of sitting on their heels, with their knees close into their armpits, is one they shared with the inhabitants of countries far more developed.

The stature was fairly developed. Dr. Milligan saw "many of them were above the middle size." Mr. Robinson found some at Port Davey above six feet. In 1819, a man was killed six feet two inches high. Dr. Story informs me that "the general size of the men was from five feet two to five feet five; the women, in proportion to the men, of course smaller." He adds, "Balawenna was a fine athletic man, more than six feet. His wife was in proportion." They were not generally so tall as the Australians, though stouter. Among the latter, Captain Sturt found one seven feet in height. Captain Jarman, in 1867, saw many over six feet on the north-west coast, and declared he had "not seen finer-looking fellows in any part of the world." Mr. Stuart noticed in the far interior "tall, muscular, well-made men." The race was not so miserable a one as some have believed. Captain Sturt described some on the Darling as "handsome and well-made men, though short in stature." At the River Chambers of Central Australia, the people were fat, short, and hearty, and at Mount Margaret, tall and muscular. On the Adelaide River, to the north, they are said by Mr. Stuart to

be "the smallest and most miserable race of men that I have ever seen."

The figure of the Tasmanian was stout and robust, as compared with the taller and slenderer Australian. The skeleton indicated vigour without coarseness. Péron refers to their broad shoulders and strong loins. But when he applied the dynamometer to test their physical strength, he found them inferior to his countrymen: it is quite likely, however, that the Diemenese exerted less force from want of practice with the instrument. Freycinet, some years after, gave a tabulated statement of power in kilogrammes; putting down the Sandwich Islander at 60, the Negro at 57, the Malagash at 54, the Maori at 51, and the Australian at 45. Buckton gives the following as relative strength of the arms: Australian 50, French 69, English 71. Marion supposed the shoulders of the Tasmanians bent out of the straight line; but that arose from the usual position in spear-throwing. Count Strzelecki thought the race "strong, square-built." The French noticed their "big belly, salient, and formed liked a balloon." This sort of development may be seen in some more civilized regions.

Dr. Joseph Bernard Davis has some remarks upon the skeleton of a female Tasmanian. Of the pelvis he writes that it is "remarkable for thinness, slenderness, and the delicacy and lightness of the bones. The central part of the iliac fossæ is diaphanous; the pubes thin, the ascending ramus of the ischium slender, and the obturator foramen large, and of a triangular form. The spinous processes of the ossa pubes are strongly developed." Professor Ecker also refers to the remarkable slenderness of the bones. Camper talks about the "peculiar" pelvis, and esteems it varying from that of the Aryan race. Strzelecki terms it "unusually narrow;" and, therefore, in the eyes of the comparative anatomist, of a low type. Weber informs us that the pelvis of the European is oval in shape, though round in the American Indian, square in the Mongolian, and oblong in the African. M. Dupont affirms that that part is very strong, and somewhat different from the pelvis of the European, in the skeletons of the old prehistoric folk of the Reindeer period. The reticulation of the Tasmanian skeleton is finer than in the European, being less rounded. The phalanges are beautiful.

The breast of the female turned a little outward, as seen in Mr. Gould's sketches. "The mammæ," as indicated by the Polish Count, "instead of being spherical, are in marriageable persons pyriform, and soon after marriage become flaccid and elongated." Dr. Knox asserts that "the reproductive organs in the Tasmanians are said to be quite peculiar in man and woman." Some have recorded the tying up of the genitals occasionally, though not in Nugees, like the Kaffirs. Dr. Forster noticed the delicacy of wrapping up among the Papuans of Tanna, &c. Labillardière saw that the Tasmanians' kindred of New Caledonia "wrapped privities in coarse stuff made of bark or in leaves;" and of the woolly-haired people of Beaupré he writes: "These islanders, who were quite naked, had the end of the prepuce tied to the lower part of the belly by a cord of the outer covering of the cocoa-nut, which went twice round them." He has this further statement of the *physique* of the Tasmanians: "In many the navel appeared puffed out, and very prominent; but we assured ourselves that this deformity was not occasioned by a hernia. Perhaps it is owing to the too great distance from the abdomen at which the umbilical cord is separated." Circumcision, though practised by some tribes in North and South Australia, was unknown in Van Diemen's Land. It is known in Cooper's Creek, near the Gulf of Carpentaria, the Australian Bight, King's Sound, and in the interior north of Lake Torrens Basin. In New Caledonia and New Hebrides it is sometimes in use. Labillardière ventures, however, to say it was known for the natives of the former island "to make an incision in the prepuce: nevertheless, out of six of them, whom we persuaded to satisfy our curiosity in that respect, we found one who had it slit in a longitudinal direction on the upper side." At Port Lincoln, from being opened thus from the scrotum to the extremity on the lower side, the member presents a most unnatural and unsightly aspect. As in other countries, the observance is connected with ancient religious rites.

Some have distinguished the islanders as but one remove from the brute. As men, they would certainly be a remove from the brutes. According to the witty Beaumarchais, "that which distinguishes man from the beast is drinking without being thirsty, and making love at all seasons." Though Mr.

Oldfield only may throw a doubt upon the Tasmanian's qualifications for manhood on the second article, all travellers agreed that he was wanting in the first. At the best, therefore, on this definition we may say, with a Scotch jury, "Not proven." Dr. Weisbach, however, from the depth of German studies, has discovered that our singular race "presents the most numerous Simian similarities, in the length of the foot, the smallness of the legs, the broad nose and mouth, the elongated arm, the broad feet, and the thin calves." It was not enough to class the poor creature with the ourang-outang; Bory St. Vincent could not honour him with such an alliance, but prefers identifying him with the most hideous of all the monkey tribe—the mandrill! Another Frenchman, Dumoutier, is pleased to write more mildly. "The Australians and Tasmanians," he observes, "with whom the human form is the most degraded, ought to be classed nearly as the last *échelon* in the human genera."

As the learned physiologists have been much indebted to the voyages of D'Urville for the illustrated parodies of the Australian people, *fancied* likenesses of whose ugliness may be seen in the Sydenham Crystal Palace, it may be well to cite the opinion of an ethnologist as to the scientific value of French art. On a sketch by Arago, in Freycinet's "Voyages," Mr. Latham has this comment: "It is evidently more artistic than anatomical. The curve of the nose is probably wholly pictorial, since the *text* gives the Ombayans *flattened* noses and thick lips!" Certainly the portraits of the Diemenese, as taken by Péron in 1802, and some of which appear in the present work, are anything but faithful renderings of the Tasmanian type of beauty.

Some of the remarks made by Mr. Huxley upon the aboriginal Scotchmen of Caithness are singularly applicable to the Tasmanians. Of the pelvis he remarks that it is indeed anomalous; "in fact, is not more unlike that of an ordinary European female than it is like that of an ordinary European male." Like the Tasmanian, it was light and slender. Again: "All the female pelves which are preserved differ from the ordinary female pelvis in the circumstances that the conjugate diameter of the brim, or antero-posterior diameter of the cavity, or both, are unusually great;"—even in some exceeding the transverse. He refers to the Australian male pelvis being of an "excessively narrow, intersciatic diameter."

Mr. Huxley was so ungallant to our Southern people as to compare the skeleton of one of the ladies with that of an Englishwoman; and then to think aloud that the lubra of the gum forest, "with her long shins and heels, narrow hips, relatively broad shoulders, retreating forehead, and projecting jaws, can hardly have been a graceful or a comely personage."

The SKIN was not the most agreeable part of their person. I have been particularly struck by its harsh, dry feel. Even the females appeared to have a skin allied to that of a rhinoceros, and the aged ones, especially, were repulsive to the touch. Without doubt the scorbutic white lines and bands upon their persons did not increase their attractiveness; but the skin itself was as if one could strike a match upon it, so rasp-like was its surface. The Old Hands were accustomed to call them scabby sheep. The Dutch voyager, Mr. Modera, said of the Papuans, "Some of them have an ugly-looking disease of the skin, by means of which the entire surface of the body and limbs is rendered scaley." Dr. Kops describes them "as if covered with scales."

The odour proceeding from the Natives, though not equally offensive with that distinguishing the Negroes, was sufficiently disagreeable, though I have heard my friend Mr. Clark, the Flinders Island catechist, declare he could notice nothing of the sort. Mr. Pruner Bey does not class our people of the Bush with the African. These are his remarks: "The penetrating odour which the negro exhales has something ammoniacal and rancid; it is like the odour of the he-goat. It does not depend on the aqueous perspiration, for it is not increased by it. It is probably a volatile oil disengaged by the sebaceous follicles. This odour much diminishes by cleanliness, without, however, entirely disappearing. We are not aware whether this race-character changes by a uniform diet, as is the case with the fishers and opossum hunters in Australia." It is amusing to read of the means adopted by the travelling Capuchin friar, when so annoyed by the flavour of his sleeping Angola attendants. He was persuaded to get a particular sort of monkey, and have it sit at the foot of his couch. "The scent of musk," quoth the Father, "with which he perfumed the chamber corrected the smell of the Blacks."

The CICATRICES on the skin of the Tasmanians and Australians are connected with the subject of physical appearances.

The drawings will illustrate some of the forms assumed by these ornaments. Labillardière thus describes the people in 1792: "Almost all of them were tattooed with raised points, sometimes placed in two lines, one over the other, much in the shape of a horseshoe; though frequently these points were in three straight and parallel lines on each side of the breast: some were observed, too, toward the bottom of their shoulder-blades, and in other places." He noticed, singularly enough, that some of the women had marked their abdomens with large semicircular incisions, one above another, to remove, as he thought, the wrinkled tokens of repeated returns of pregnancy.

Captain Burton's description of the Egbas of Western Africa will apply to these Southern races: "Some of the tattoos are painfully ugly in lines of scars, and dreadful knobs and marbles, raised in *altissimo rilievo* by some encaustic process. Many of the children are marked from head to foot with little gridirons of cuts." Those of the Manganja tribes of the Shire River, near the Zambesi, were likewise tattooed over all their body; and various names were given to the cicatrix on different parts of the body, being called "nkwekwe" on the cheek, "mpenye" on the forehead, and "kakerere" on the breast. Our Natives had not the knobs along the forehead and nose, which are the delight of a tribe in East Africa.

It is different from the true *tattoo*, which is by needle-pricking, and the application of colouring matter. Our Tasmanian women were less marked than the men. One, who saw the infliction of the adornment upon a girl, describes her screams of agony from the torture. Her head was secured between the legs of a strong fellow, while another operated on her. The boys would emulate each other in standing unflinchingly the long, deep cuts made by the sharp stone or bit of glass. The wound was kept open with wood-ashes; and, when healing, the raised scar remained for life. A gash is described in a girl which was an inch long, $\frac{3}{16}$ in. deep, and half an inch from its neighbouring wound. The cuts extended from the breast to the shoulders. Some Australians put into the cuts grease, and the Papuans fat or clay.

The Tasmanians did not generally have so many cicatrices as some of the tribes of New Holland. The shoulders and breast were the principal parts subjected to the operation. Labillardière

ALPHONSE, THE TASMANIAN

From a Portrait by MR T NAPIER, J P)

mentions that these "tubercles were symmetrically arranged, exhibiting sometimes lines four inches in length; at other times, parts placed at different distances." Capt. King saw the natives of the north-west coast have the incisions every three inches in front, in horizontal lines; each being an inch in diameter, and having an elevation of nearly half an inch. They are not large near Cape York. Some Moreton Bay tribes have the lines transverse, and others longitudinal. In Port Phillip, some had cuts arranged in the form of a star; while others had a central cicatrix of a long, spindle shape, with three similar ones on each side, but of gradually-decreasing size. Although the practice was regarded as universal with the Papuan race, the Dory natives of New Guinea were found without the cicatrix.

Mr. C. Johnson, when with the Wahama of North-eastern Africa, said: "I amused myself copying into my notebook the muslin sprig-pattern incised upon the skin of her body; in front, from the neck over her breasts to the waist, and on her back, from the shoulders to the hips." He found the tribe symbol cut upon the breasts or shoulders of the boys. The instrument used was a piece of obsidian, or volcanic glass. Mr. Parkyns, the author of an excellent work on Abyssinia and the neighbouring countries, found the females of Kordofan gashed over with cicatrices as large as pigeons' eggs. He noticed such scars larger on the pure black than on the copper-coloured of Africa, and remarked that a similar wale would be left on the shoulders of a negro after a sound whipping.

Some singular patterns of cicatrices are adopted by various Niger tribes. The following may be selected: one line across the centre of the forehead; six perpendicular incisions between the eye and ear; three short perpendicular cuts on each temple, and three short horizontal ones on the nose; six perpendicular in front of the ear; twelve horizontal before the ear; two curved lines from the ear to the eye; numerous ones on the forehead; three perpendicular on the breast and belly, and seven perpendicular on the forehead; curved from the temple to the chin; four broad on the cheek; twelve curved on the cheek; two rows of fine perpendicular under each eye; devices on the breasts and arms; curves on the angles of the jaw; two horizontal opposite the mouth; three round spots on each temple; an arrow-head on the temple, &c. The Bunn tribe have three

slashes from the crown of the head, down the face, and curving towards the mouth; the ridges are in high relief. Some Niger tribes produce the effect by a sort of cupping, employing small horns, and sucking out the air.

The Mozambique people, according to the fine sketch by Péron, were dotted all over in beautiful and regular figures. The Egbas have a gridiron of three cuts on each cheek. The freeborn women have several raised lines, from the wrist up the back of the arm, and down the back, like long necklaces. These vain marks they call "Entice my husband." The Takpas of Nupe have one long cut from the nose to the ear, while their neighbours flaunt in seven perpendicular and five transverse lines. The Blacks of Kakanda have them from cheek to ear, and then give them a tattoo-blue with some native antimony.

My eldest son, when a resident in the far north of Queensland, investigated the process, and saw that a vegetable fluid was squirted by the operating doctor into the wound. He was desirous of trying the experiment upon his own person. He submitted to the cutting, and received the sacred injection. The part was painful for some time, and rose in inflammation; but gradually the edges of the wound came together, and only a common scar remained, instead of the cicatrix he promised himself. This would tend to confirm the idea of Mr. Parkyns, that these particular ornaments are, at least, best raised upon the darkest skins.

The SKULL of the last Tasmanian man, for the abstraction of which Dr. Crowther of Hobart Town has been held responsible, would not be a typical one of his race. In fact, it is scarcely safe to pronounce upon any skull as a type of a nation. Mr. Crawfurd thought the attempt an absurd one. Dr. Meigs, after a review of 1,125 crania, declared he could find none typical. Professor M. J. Weber acknowledges that "there is no proper mark of a definite race-form of the cranium so firmly attached that it may not be found in some other race." Dr. Paul Topinard seemed to favour that view, when exhibiting to me some Tasmanian skulls in Paris. One in particular justified his expressions of admiration for its elevation of character. The great authority of Professor Huxley may be instanced, when he testifies that "cranial measurements alone afford no safe indication of race." Even Dr. Pickering was led from an

examination of a Native's skull to exclaim, "His head might compare with an antique bust of a philosopher." An inspection of the portraits of Manalagana, Wooreddy, and Walter George Arthur would make one doubt the low estimate of Tasmanian cranial development. Certainly a comparison of their heads with the representation of the head of the German philosopher, Immanuel Kant, as given in Von Baer's work, would not illustrate the superiority of the latter, which is of a more retreating forehead, with a far greater mass behind than before the hole of the ear. It leads one to conclude, with Professor Cleland, that "there is no foundation whatever for the supposition that the lower races of mankind have the forehead less developed than the more civilized nations."

The Swedish Retzius would make four classes of crania;—the *Dolichocephalæ orthognathæ*, the *Brachycephalæ orthognathæ*, the *Dolichocephalæ prognathæ*, and the *Brachycephalæ prognathæ*. He finds the two first in Europe, the third in Africa, the third and fourth in the South Seas and in America, and all four in Asia. Zeune simply divides them into high, broad, and long skulls.

As the Australian generically may be supposed to include the Tasmanian, the opinions of physiologists and anatomists upon the one can be applied to the other.

Dr. Owen has this comparative view: "Between the lowest forms of African and Australian skulls and the highest forms of European skulls the difference in size and shape is least in the basi-occipito-sphenoids, in the ex-occipitals, alisphenoids, and orbito-sphenoids; it is greatest in the super-occipital parietals, frontals, and nasals. The maxillary and mandibles are next in degree of variability, especially at the terminal anterior part which represents the hæmal spine, and is the seat of the characters which ethnology terms *prognathism, orthognathism, opisthognathism*,"—the lower jaw projecting forward, being straight, or thrown long behind.

Mr. Huxley has scientifically described the part in question. "The Australian skull," he says, "is remarkable for its narrowness, and for the thickness of its walls, especially in the region of the superciliary ridge, which is frequently, though not by any means invariably, solid throughout, the frontal sinuses remaining undeveloped. The nasal depression, again, is extremely sudden,

so that the brows overhang, which give the countenance a particularly lowering, threatening expression. The occipital region of the skull, also, not unfrequently becomes less prominent. Many Australian skulls have a considerable height, quite equal to that of the average of any other race."

The principal local *savan* who has given a supposed typical Australian head is the German Dr. Ludwig Becker, who so early found a grave in the ill-fated Burke and Wills expedition across the continent. "The bones," he observed, "are very much developed, and of great strength. The peculiar character of the Australian race is in this specimen well represented. Parietal diameter, 5⅛ inches; occiput-frontal diameter, 7½; width of forehead between the temples, 3¾. The zygoma, though very strong, is less projecting and less curved than in the Mongolian race. The upper jaw slants so much forwards that the facial angle is lowered to eighty-five degrees. In the same proportion the chin falls backwards. In consequence of the obliquity of the jaw, the front teeth are also in an oblique direction; so much so, that after some time, by chewing and gnawing, the teeth are worn away in such a manner as to resemble molar teeth, for which indeed they are often mistaken. The form of the upper half of the cranium, when viewed from behind or in front, has a pyramidal shape, which I found to be the case with all the native skulls I had under examination. This appears to me to be a typical characteristic of the Australian race."

Mr. Becker's pyramid has often struck others, who have remarked the resemblance to the pear-shaped head of the shrewd King of the French, Louis Philippe. This form has been detected also in the Reindeer folk of the French caves. Mr. Samuel Laing, in his interesting revelations of the Caithness cists, imagines "the earliest inhabitants of North Briton were *kumbocephalic* (boat-headed), approaching to a Negroid or Australian, rather than to a Mongol or Arctic type." Again, he writes: "This tribe of aboriginal Britons must have more closely resembled the Australian or Tasmanian, than the Laplander or Esquimaux." The decision of Mr. Huxley, from an inspection of the crania of those aboriginal Scotchmen, was, that, in their general appearance and prognathous character, those of the Tasmanians and Australians "come nearest to the ancient long skulls of Europe."

Mr. Sohier, the Melbourne phrenologist, described the bone as thick and spongy; and not unlike, therefore, the skull of the ancient Egyptian. A Tasmanian skull in my possession is of singular thickness. Campier noticed the great thickness of the *os frontis* of the Tasmanians. Dr. Pruner Bey compares our Southern Blacks with the prehistoric cave-men. His measurements of the celebrated Neanderthal skull give 173 as length of hemispheres, 112 for width of anterior lobes, 136 for greatest width, and 66 for greatest height. The Australian he puts at nearly the same,—calculating those distances for his cranium at 164, 100, 125, and 77 respectively.

It is hard to determine the relative excellence of crania. According to Mr. Huxley's *Australoid*, that people have "an invariably long skull; that is, a skull, the breadth of which is less than eight-tenths of the length." And yet Mr. Robert Dunn regards these long, or dolichocephalic, heads as "the representatives of the highest," as the broad, or brachycephalic, are of "the lowest types of humanity." In the barrows of the Britons are found both sorts. Mr. Carter Blake, a competent judge, describes a skull from a cist in Uist Island, of Scotland, as of an "ovately dolichocephalic form," and having a narrow forehead, with great projecting brow, like the Tasmanian. The Negroes have long heads, while the Andamaners, not more intelligent, have short ones, as the Chinese. M. Péron calls the Tasmanian skull "broad-headed, especially remarkable for its length from the chin to the sinciput."

There are, however, some who distinguish the Tasmanian skull from the Australian as of quite another type. In the letter-press accompanying Dumoutier's plates we have the following respecting the Tasmanian cranium: "The skull exhibits a less pyramidal form than with the Papous of the Isle of Tond, or in the head of the Australians of Port Essington,—but more than with the Vitians. Yet the front is, perhaps, more thrown back than elsewhere. The depth of the skull, measured from the portion most projecting from the crown to the middle part of the suture of the occipital with the parietal, is nearly a quarter more considerable than the height taken from the extremity of the mastoidal apophysis to the summit of the crown. One sees that this is a more sensible difference in the proportions than that offered to us by the heads of the Polynesians. At the

same time the zygomatic arcades are more separated, and the maxillary bones more forward. These characters are notably more pronounced than with the Negroes."

In Dr. C. E. de Baer's plate of a Papuan female, the forehead is placed nearly perpendicularly, though of narrow top. Dr. Hans Carl Leopold Barkow, of Breslau, has pictured the Tasmanian skull the opposite of the Bushman of Africa, being broad in front. In his plates, the cranium of the Tasmanian is rounded gently at the back, and gradually narrows toward the front from the widest part, which is placed behind the centre of the head. He gives the Kaffir the greatest width at the middle, and makes it terminate abruptly behind and before nearly in a point. His Tasmanian skull is higher, rounder, and wider than that of the Bushman, with a simple form of suture. Dr. J. B. Davis refers to the repeated failure of the alisphenoids to reach the parietals; and which, he says, "is intimately connected with the defective development of the anterior lobes of the brain." He speaks of "the complex serrations of the middle of each side of the coronal suture, so common in negro skulls." One has asserted that, like as in the Simia troglodytes, the temporal bone of the Tasmanians and Negroes is immediately connected with the frontal. Dr. Pruner Bey finds the frontal sinus wanting in Van Diemen's Land. The nervous system, as Dr. Tiedemann states, was different from that of the European.

Compared with their neighbours, I was struck, at the splendid Anatomical Museum of the Jardin des Plantes, with the small head of the New Caledonians. The busts of Manalagana and Wooreddy lost nothing by comparison with the crania of other Papuans, though some of the New Guinea heads were wider in front than most of the rest. Those of New Caledonia and New Hebrides have been styled hypsi-stenocephalic, or the high and narrow. In the Dutch collection of Van der Hoeven, the New Hebrides head is broader at the top than the Tasmanian, being oblong, narrow, and of a fair height.

In comparing the Tasmanian with the Australian skulls in the Paris collection, I could observe no inferiority in the former. While one of the former in circumference gave 54 for male and 50 for female, that of the latter came respectively to 50 and 47. A very nicely balanced female skull is shown, though the chin, as in the race generally, is retreating and small. Cautiousness

is, phrenologically, the most developed organ in the female skull, and Destructiveness and Combativeness were prominent in the male. A rough handling of the callipers at the Oxford Museum upon two Tasmanian crania gave the following results:—extreme length, $7\frac{1}{4}$ and $6\frac{7}{8}$; across from the parietal, $5\frac{1}{4}$ and 5; from the ear-hole to the top of the occipital, $4\frac{1}{2}$ and $4\frac{1}{4}$; from the ear to the base of the forehead, $4\frac{1}{2}$ and $4\frac{1}{8}$; from the ear to the top of the forehead, $4\frac{3}{4}$ and $4\frac{5}{8}$; from the ear to the top of the head, $4\frac{1}{2}$ and $4\frac{7}{8}$.

At the Museum of the London College of Surgeons I found the best collection of Tasmanian skulls. It was to enrich this noble collection that Dr. Crowther is said to have performed the office of decapitator upon the body of the last man of the race in Hobart Town. My measurements were necessarily, from my unprofessional character, of a defective order. I confined myself to those of a simple kind.

Confirmatory of certain particulars already stated, the notes on these crania are valuable. Ronald Gunn, Esq. reports of one: "The apex of the alisphenoid reaches the parietal on both sides of the head." Of another, by Mr. Guthrie, it is said: "The alisphenoid joins the parietal on both sides." The same is said of a female skull. Of one it is stated, "A wormian ossicle is interposed on the left side;" and of another, "A wormian bone is interposed between the alisphenoid and the parietal on both sides of the head."

The skull of a warrior, killed at Brusby Plains, I noticed with very large Destructiveness and Caution, and large Combativeness, Veneration, and Firmness. As in almost all Tasmanians, Hope, Love of Approbation, and Conscientiousness were not well developed; giving to some skulls, therefore, a ridge-like top. In a female cranium, short behind, there are strong Firmness, Caution, Adhesiveness, and Benevolence, with fair intellectual parts. Firmness, so conspicuous in all native female heads, was often brought into exercise by waddy blows. Philoprogenitiveness was generally expressed prominently. In one very prognathous skull the animal propensities were in great force, while Veneration was unusually developed, and the skull did not narrow so much as others toward the front. In a female head Causality was very well exhibited, and the top of the forehead much broader than usual. The whole was a well-developed

skull, and quite equal to the average of the civilized human family. In a female skull, marked by a waddy blow on the forehead, and an axe-cut on the parietal, Cautiousness was of immense size. In making these remarks, I am aware that many, who cannot find such organs beneath their knife, will smile at my simplicity: unable, however, to determine the philosophy, I cannot repudiate the experience of many years' observations.

The warrior's skull had a front width of $4\frac{1}{10}$ inches, and a height above the ear-hole of $4\frac{7}{10}$. From the ear to the front it was $3\frac{5}{10}$, and to the back $3\frac{7}{10}$. A female had a length of $6\frac{5}{10}$, a width (by the parietal) of $5\frac{2}{10}$, and a height of $4\frac{6}{10}$. The front width was 4. From the ear to the front was $3\frac{5}{10}$, and to the back $3\frac{2}{10}$. The owner had resided on Bruni Island. Another from the same place gave $6\frac{4}{10}$ length, $5\frac{2}{10}$ width, $4\frac{7}{10}$ height. The width at the orbits of the eyes was $3\frac{9}{10}$; from the ear to the front, $3\frac{2}{10}$; to the back, $3\frac{2}{10}$. A powerful head of a man was $7\frac{2}{10}$ long, $5\frac{4}{10}$ broad, 5 high. The orbit front was $4\frac{1}{2}$; to the front from the ear it was $3\frac{5}{10}$, to the back, $3\frac{7}{10}$. The side view presented a good moral development. In another male the length was $7\frac{4}{10}$, width, $5\frac{2}{10}$, height $4\frac{8}{10}$, with 4 to the front from the ear, and $3\frac{4}{10}$ to the back. The frontal orbit width was $4\frac{2}{10}$. In a female the length was $6\frac{6}{10}$, width $5\frac{3}{10}$, height $4\frac{5}{10}$, and frontal width $4\frac{2}{10}$. In this head the distance from the hole of the ear to the front was no less than $4\frac{1}{10}$ to $2\frac{5}{10}$. It afforded the solitary instance of large Love of Approbation. One of a male had a length of $7\frac{5}{10}$, width $5\frac{2}{10}$, height $4\frac{5}{10}$, and a frontal width at the base of $4\frac{5}{10}$. This, also, exhibited a preponderance of the intellectual and moral over the animal; being $4\frac{3}{10}$ to the front, and $3\frac{2}{10}$ to the rear.

The remaining skulls may be briefly described relatively as to length, width, height, ear to front, ear to back:—$7\frac{2}{10}$, $5\frac{5}{10}$, $4\frac{6}{10}$, $3\frac{7}{10}$, $3\frac{5}{10}$; 7, $5\frac{4}{10}$, $4\frac{7}{10}$, $3\frac{7}{10}$, $3\frac{3}{10}$; 7, 5, 4, 4, 3; $6\frac{8}{10}$, $5\frac{2}{10}$, $4\frac{5}{10}$, $3\frac{4}{10}$, $3\frac{4}{10}$.

But having made a selection from the scientific measurements of Dr. Joseph Bernard Davis, I would lay the table before the reader, as a better comparative estimate can be made. The key is thus described:—

A, internal capacity in oz. avoirdupois; B, circumference round forehead, an inch above fronto-nasal suture, and over prominent part of occiput; C, fronto-occipital arch, from the fronto-nasal suture, along

centre of calvarium, to posterior edge of the foramen magnum; D, intermastoid arch from tip to tip; E, longitudinal diameter, or length, from the glabella to most prominent part of occiput; F, transverse diameter, or greatest breadth; G, height, from plane of foramen magnum to vertex; H, length of face, from nasal suture to tip of chin; I, breadth of face, or interzygomatic diameter; J, proportion of the greatest breadth F to length E, the latter taken as 100; K, proportion of height G to E. He terms 80 or more to 100 the brachycephalic, and others the dolichocephalic skulls.

SKULLS.	A.	B.					G.	H.	I.	J.	K.
17 Britons	76·3	20·4	16·5	14·3	7·1	5·6	5·2	4·6	5·1	·79	·71
Ancient Scots	70	20·5	14	14·1	2	5·4	5·1	...	...	·75	·70
36 Anglo-Saxons	71	20·5	14·6	14·3	·2	5·5	5·2	4·5	5·1	·74	·76
27 Low-caste Hindoos	67	19·3	14·2	13·6	6·9	5·2	5·1	4·3	4·7	·78	·74
21 Chinese	73	19·7	14·5	14·4	6·9	5·3	5·3	4·5	5	·76	·79
17 Negroes	71·3	20·0	14·5	14·4	7·1		5·3	4·5	5·1	·73	·74
Bushmans	63·5	19·2	14·3	12·9	6·8		4·9	3·9	4·5	·73	·72
10 Esquimaux	76·7	20·6	15·2	14·3	7·4		5·6	...	5·4	·71	·75
15 Australians	65·1	19·9	14·6	13·8	7·1	1	5·2	4·2	5	·71	·73
Maories	72·7	20·1	14·5	14·5	7	2	5·6	4·5	5·4	·75	·80
116 Kanakas	73·9	20	14·5	14·8	6·8	5	5·6	4	5·1	·80	·81
9 New Hebrideans	72	20	14·7	14·3	7		5·4	4·5	5·2	·72	·77
14 Dyaks	69·7	19·6	14·3	14·3	6·8	5·2	5·4	4·4	5	·77	·80
Khond, India	61	18·9	14·1	13·6	6·7	4·9	5	5	4·8	·73	·74
6 Tasmanians (male)	70	20·6	14·9	14·3	7·4	5·4	5·4	4·3	5·2	·73	·73
10 Tasmanians (both sexes)	67	20	14·4	14	7·1	5·3	5·3	4·1	5·1	·74	·74
Smallest Tasmanians	60	19·5	13·8	13·5	6·8	5·3	5·1	4	5·1	·71	·71
Largest Tasmanians	78	21·3	14·6	14·6	7·5	5·6	5·6	4·5	5·4	·78	·80

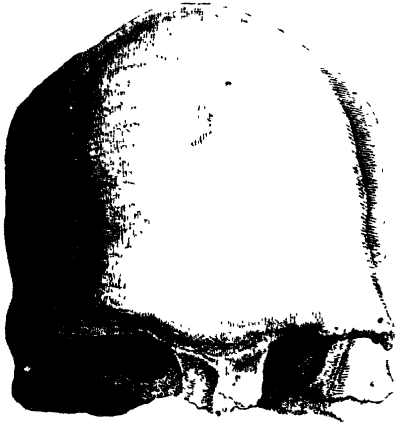
According to internal structure, the *mean* capacity of the Briton was 97·5; Old Scot, 86·9; English, 90·0; Irish, 91·2; Russian, 98·5; Turk, 93·3; Hindoo, 81·1; Chinese, 92·6; Dahoman, 90·7; Kaffir, 92·6; Bushman, 77·3; Esquimaux, 90·6; Dyak, 85·9; New Caledonian, 91·3; Australian, 80·9; and Tasmanian, 82·5.

The brain, as to volume, has usually been regarded as the test of mental power; and thus the supposed small brain of the Tasmanians has been urged as the exponent of their limited intellect. Mr. Williamson drew the following picture of three races, in the relative sizes of the interior chamber of their skulls: the Englishman was reckoned as 43, to the 32 of the American Indian, and 32 of the Tasmanian. The examinations of others are more favourable. While Mr. Williamson puts the Tasmanian brain at seven-tenths the size of the English, Dr. Davis ranks it at nine-tenths. Professor Waitz even speaks of the savages of Van Diemen's Land having "uncommonly large heads." It is known that many races, as the Tartars, have more brain than the refined natives of Europe. That of the Negro is

larger than that of the Hindoo, leading Dr. Hunt to remark upon that cranial capacity over a people "who have developed a high civilization, a profound philosophy, and a rational religion." In Dumoutier's plates, the Chinese brain is represented as not only inferior to the Tasmanian in volume, but as lying differently in the chambers of the skull: in the latter, while larger in all parts, it is particularly so in the base, which is lower, and extends further backward and forward.

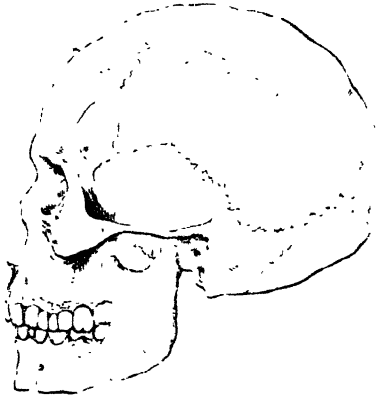
It was then remarked that the relative position of the brain formed an important consideration in comparative estimation, though less so than the constituents of the substance, or the number and character of its convolutions. Dr. Tiedemann noticed that the gyri and sulci in both hemispheres of the Negro's brain were more symmetrical than in the European, and more after the ape. He found the convolutions less numerous and more massive, though more so than with the lower Bushman. Mr. Huxley has given an interesting account of the brain of the Hottentot Venus, whose remarkable preserved body I saw in the Museum of the Jardin des Plantes of Paris. "These folds," writes that distinguished anatomist, "if those of the two hemispheres be compared, present an almost perfect symmetry, *such as is never exhibited* by the normal brains of the Caucasian races. This regularity, this symmetry, involuntarily recall the regularity and symmetry of the cerebral convolutions of the lower species of animals." Mr. Carter Blake assures us that not only have savages simpler convolutions, but that uneducated, untrained people of civilized races have that peculiarity of smooth and regular hemispheres. It was such a brain, in its simple character, that the Tasmanian possessed, so far as I have been able to ascertain. Their skull often assumes the appearance of high intelligence. But it must not be forgotten that Mr. Huxley some time ago said of the celebrated Engis cranium belonging to the prehistoric period—"a fair average human skull, and might have belonged to a philosopher."

The difference observed between the crania of males and females is less among savages than the civilized. The inequality increases with the growth of civilization. The capacity would, likewise, appear to grow with it. Professor Broca was struck with the fact when engaged in the examination of Parisian skulls of past ages. Dr. Boyd has given some figures as the



TASMANIAN FEMALE SKULL.

Front view.)



TASMANIAN SKULL.

TASMANIAN FEMALE SKULL.

Side view.)

result of his examination of the brains of 2,086 male and 1,061 female heads. He found the weight of the male to vary from 1,285 to 1,366 grammes, and that of the female from 1,127 to 1,238.

The *prognathous* form attracted early attention. Certainly some skulls have a formidable show of this deformity, which has led some hastily to class the Tasmanians with the Negro, and consign the whole nation to the lowest class of humanity. Yet the Irish would hardly like to be classified after the prognathous jaw still to be found in the mountain retreats of their island, nor would the English be satisfied by a selection taken from their own prisons and poorhouses. Travellers speak of seeing in the north-west of Ireland "open, projecting mouths, with prominent teeth;" and Mayhew found some London poor, "showing," says he, "that kind of mixture of the pyramidal with the prognathous type, which is to be seen among the most degraded of the Malayo-Polynesian races."

In the Tasmanian child the projection of the jaw was not seen, and it was usually worse in the female than the male. In Dumoutier's plate of Guenney, of the Port Sorell tribe, the prognathous is very strongly exhibited. In another part of the volume he has a Tasmanian with the upper jaw remarkably prominent. Mr. Pardoe, the dentist of Melbourne, describes the jaw of the continental blacks in terms to be applied to the insular ones. "The jaw," he observes, "in most skulls is larger than in Europeans, and comes sweeping round, producing a flat face and wide mouth. The chin is small and effeminate." The comparative non-appearance of the type in children led Pruner Bey to declare: "In this respect the Negro, the Hottentot, the Australian, the New Caledonian, do not indicate in the osseous system the difference which will arise later." He makes some statements as to the reputed cause, saying, "Prognathism has been, and may be considered, at least partly, as the result of the action of the inferior jaw on the concentric arch of the superior jaw;" though he thinks "the depression of the nose is as essential to produce prognathism, as the increase of the jaws." Volney imagined the peculiarity to arise from the action of the sun in hot climates, Mr. Alex. Nasmyth from the constant tearing of food, and Dr. Owen from late weaning. In some Tasmanians the feature was only present in a slight degree, and far

less than in many Australian skulls. One of the latter, in the Paris collection, is the most repulsive of all the crania there exhibited, and, as Professor Broca told me, of the very lowest type of man. There was no occasion, on account of peculiarities of visage, for M. Emile Blanchard, in his illustrations of Dumoutier's plates, to pronounce the Tasmanians a distinct race from the Australians. Yet he is pleased to add: "We think there exist distinctive peculiarities; but, for want of necessary materials proper to determine that which makes the difference, one is obliged to stop at the simple indication of a point important to investigate." Omitting, however, the hair question, there would be found far less difference between the two than between the Englishmen of the north and south.

No account of the physical condition of the Tasmanians would be complete without a reference to that physical change in their system produced by the advent of Europeans, and alleged to be the true cause of the barrenness of the women.

Count Strzelecki, as described in my previous work on "The Last of the Tasmanians," first prominently developed the doctrine. He mentioned this poisonous effect of contact with the white man, depriving the coloured woman of power to bear children subsequently by a black man. He contended that examples of this general principle were to be found in both hemispheres. In the chapter upon the "Decline" of the race, I gave a number of authorities proving or disproving the statement. The Rev. George Taplin, of Queensland, and the German missionaries in Victoria, were confident of its incorrectness. Professors Goodsir, Mansel, and Carmichael believe it is a law of nature. M. Poulet fancies that "however small the number of hybrid women of the first degree may be, those women ought to have produced with the Whites, if they had been very prolific, a progeny which ought to have become numerous in the population of a colony." Mr. Alexander Harvey, of Aberdeen, in his "Fœtus in Utero," treats of the inoculation of the maternal with the peculiarities of the paternal organism. He advances a theory of Dr. M'Gillavray's, which is thus stated: "The embryo, whilst *in utero*, subjected the mother, by some sort of inoculation, to organic or dynamic modifications, the elements of which had been transmitted to the embryo by the father, and the mother would then retain the impress permanently." It is asserted that a mare

having given birth to a mule, conceives subsequently with greater difficulty from horses than from asses. It is certainly singular that the Pitcairn Islanders are descendants of white fathers from coloured mothers; though there were six Tahitian men, as well as the nine Englishmen, cohabiting with the six Tahitian women, the mothers of the present race.

The champion on the other side is Dr. T. R. H. Thomson, R.N., who would account for the sterility from infanticide before birth, and the physical deterioration of the woman from moral causes. "In partaking of the white man's comforts," he says, "she is too often the recipient of his vices." Elsewhere he remarks: "She returns to her tribe with a broken-down constitution, probably past the usual time of life for conception (as they seldom bear children after thirty), to prove, in some instances, sterile."

But, in common with many colonists, I have been led to attach some fault for this acknowledged infertility to the other sex, and not to fix the charge upon the women alone. There is a curious story told by Rengger, cited by Dr. Waitz, relative to South American Indians. "Among some tribes," says he, "the sexual appetite seems to be proportionably weak in the men: hence the women have intercourse with the negroes, while the men consider it beneath their dignity to cohabit with a negress." The Tasmanian men did not trouble the European females, while the black women had a most decided preference for white companionship. In by far the majority of cases, such a life with them, as with our own prostitutes, was sufficient to produce barrenness with any colour. Where they confined their society to one European, there was no lack of family. But strong drink usually broke down the weak barriers of virtue, and the one dreaded disease arrested fertility. The communication of such a plague into the native camp would tend still further to diminish the virility, already sapped by drunkenness and premature decay, in the male Black.

There is something cheerful, after all, in contemplating a period when the deformities of races will disappear, though sad to recognise the departure of individuals. The growth of real beauty is a satisfaction to the refined mind. Professor Owen has an imaginative glance at the future, in the following beautiful picture of the progression possible for the human family:—

"In the lapse of ages, hypothetically invoked from the mutation of specific distinctions, I would remark that man is not more likely to preserve his than contemporary species theirs. Seeing the great variety of influences to which he is subject, the present characters of the human mind are likely to be sooner changed than those of lower existing species. And, with such change of specific character, especially if it should be in the ascensive direction, there might be associated powers of penetrating the problems of zoology, so far transcending those of our present condition, as to be equivalent to a different and higher phase of intellectual action, resulting in what might be termed another species of zoological science."

TASMANIAN HAIR.

CHAPTER XII.

LANGUAGE.

THE Tasmanian language presented some practical difficulties to the student. Although many of their words were long, but few could compete with the Mexican teteunamiquibztli, which a lover had to articulate for kiss; although the following is given as an Australian word — bumabumabalimambilngariawagiri. The Rev. L. E. Threlkeld gives kottillemurrorongngearunba as a translation of the long Indian word nummatchekodtantamoonganunnonash—a loving desire. They were, perhaps, long enough to have displeased Cotton Mather, who said of the Indian tongue, "Its words are long enough to tire the patience of any scholar in the world; one would think that they had been growing ever since Babel into the dimensions to which they are now extended." Poor man! he, and some of his witch-hunting and hating clerical friends, might have found the vocabulary of the Tasmanians as puzzling to the devil as ever the Indian one was; for, said he, "once finding the demons in a possessed young woman understand the Latin, Greek, and Hebrew languages, curiosity led me to make trial of this Indian language, and the demons did seem as if they did not understand it." In that case it would not do for the service of exorcism. The "Get thee out," in the soft melody of the islander, had no effect on the British visitors, who thoroughly possessed the poor Blacks.

Dr. Milligan accused the Aborigines of increasing the difficulties of their language to the English student by their habit of clipping words. He declares them guilty of "carelessness and laxity of articulation, and in the application and pronunciation of words." Could it be possible that they indulged in the fashionable habit of *slang?* Punch confesses to the aristocratic indifference to the letter *r*, while Cockneys are sup-

posed to be absurd with *w* and *v*. But the worthy Protector was equally troubled by another habit of the Natives, of substituting gestures for words here and there, making confusion worse confounded to the uninitiated. The traveller in Italy is much amused by the shrugging and hand-talking of the people, and is disposed to blame them, in like manner, for omitting part of a word or sentence, and indulging in an expressive motion, the meaning of which is lost upon the perplexed foreigner. He who goes to an Italian theatre where the common people congregate will be as astonished at the Italian as at the gesture language.

The same thing amused me when talking with the aboriginal women. Their attitudes, winks, nods, twists, eyebrow liftings, and rapid arm and finger movements, were not less wonderful than what I have seen in a lazzaroni quarrel at Naples. But Dr. Milligan is right enough in saying that the carelessness of sound and word, in "the habit of gesticulating, and the use of signs to eke out the meaning of monosyllabic expressions, and to give force, precision, and character to vocal sounds, exerted a further modifying effect." Other orthoepical errors are thus described: "The language when spoken by the Natives was rendered embarrassing by the frequent alliteration of vowels, and other startling abbreviations, as well as by the apposition of the incidental increment indifferently before or after the radical or essential constituents of words."

The articulation of words is ever a difficulty. What scholar can tell us the sound which Romans gave to their Latin words? The Esthonians have a pretty legend upon this, saying, that once upon a time the Father God, having given the various peoples of the world their several languages, could not tell how to bestow on them a judicious selection of sounds adapted to these. So he gathered all the races together near a huge pot in which he had placed boiling water, and bade them select their alphabetical sounds from the varied music presented by the water in a state of ebullition. The rude Thlinkithians could only account for their difference of articulation from others by supposing that in some great flooding catastrophe they got on one side of a rock, and all the rest of the world on the other. Captain Bligh formed a poor opinion of our Tasmanian tongue, when he spoke of the people cackling like a lot of geese. Others, better informed,

have been struck with the delicacy and harmony of the language. They had the French sound of the *u*, and the use of the Scotch *loch*.

The Chinese, it is said, have 1,203 sounds to 48,000 words. We know not the numbers in the native tongue. Their words, at any rate, were much fewer. Instead, however, of being too hard upon the islanders for this deficiency, two things should be observed;—that the Anglo-Saxons possessed a very small vocabulary, and that the Tasmanians, with all their linguistic ignorance, had appellations for more natural objects in their country than most Englishmen, perhaps, have for those in their own.

The acquirement of a language by ear, and that by being brought in contact with various dialects of the same in one locality, would be no easy task; yet this was the way in which the people of Van Diemen's Land in olden times had to learn the native speech. Mr. G. A. Robinson vaunted his knowledge, and yet admits the great difference of dialects. When at Flinders Island the Babel of tongues was heard, the obstacles to a right perception of the language were increased considerably. The trials of voyagers and travellers in catching a meagre vocabulary need not be magnified. Two men hearing the same word will often get varied conceptions, according to the development of their organ of tune and their habit of attention. But other difficulties are well pointed out by Dr. Carl Scherzer, of the "Novara" expedition. "If it was wished," said he, "to know the word in their language which expressed 'blue,' and, in order to make more intelligible what was required, a variety of objects of a blue colour were pointed out, they almost invariably named the object itself, and not the colour. Or, again, one wanted to know what they called 'leaf' in their language, and indicated the leaf of a tree standing near: the Native, however, replies by giving the name of the tree itself, instead of the word expressing 'leaf.'"

It was absolutely necessary to learn the language from the people themselves. And yet the learned author of the "Researches into the Early History of Mankind" takes some exception to the Protector's criticism upon the tongue, by saying, "Dr. Milligan is, I believe, our best authority as to the Tasmanians and their language, but he probably had to trust in this matter to native information, which is far from being always safe."

No one was more sensible of this than the gentleman himself. In a recent letter to me Dr. Milligan is pleased most candidly and honourably to state his humble view of his own performances. "You will bear in mind," he says, "that my opportunities for acquiring even the slight knowledge I have of the language only occurred when but few of the Natives remained, and these consisted of one, two, or three individuals of distinct tribes from various parts of the island, whose dialects were often very different from each other, and that they much more frequently used English words even amongst one another than those of tribal dialects. Indeed, it was a labour involving a great deal of time and patience to get from them the imperfect collection of words belonging to various tribes, which I arranged under the name of a vocabulary."

Our ignorant islanders never manufactured an alphabet for themselves, being, in this respect, as degraded as some of the races now celebrated for learning. Even the Greeks had to learn the elements from the Phœnicians, or get them picked out ready-made from the teeth of a dragon. Yet despised as the tongue of the Aborigines may be by some, at least as much could be said of it as of the Gaboon of West Africa, of which the Rev. Dr. L. Wilson said: "The language until a few years past has never been written; the people have no idea of the power of letters; and yet all the complicated principles of their grammar have been preserved with unvarying uniformity."

Merriment has been made out of the obtuseness of the intellect of a race who could not count up beyond five, like the Australians and Tasmanians. There are others beside who could only count up to that number. The Abipones of South America reach three. The Rev. Mr. Galton asserts the same of the Damaras of Africa. He says, "They puzzle very much after five;" and accounts for it by "difficulty presented in the hand necessary to grasp and secure the fingers that are required for units." Sir John Lubbock, referring to the quinary system of the tribes of America and Africa, says that the word for *five* is the same as for a *whole hand*. He is then pleased to have a word with the southern people in this remark: "while among the miserable natives of Van Diemen's Land the reckoning of a single hand, viz. *five*, is called *puganna*, a man." And yet, while Semitic and African numerals are acknowledged to rest upon an

archaic basis, those of the Tasmanians may gather a little respectability on the ground of antiquity at least. The Esquimaux, Choctaws, &c. count by hand, calling *ten* two hands, &c. The Caribs had their word for *man* the same as for *twenty*, including fingers and toes. With the Esquimaux *ten* is the little finger. The Foulahs of Africa have the quinary system, while their neighbours the Mandingoes have the denary. The quintal system prevails among the Papuans of New Hebrides: *six* is *one* with the prefix of no; *nine* is no-beu, beu being *four*. In New Caledonia, or the Isle of Pines, the prefix of no is given to the second quinary. The Peruvians and Araucanians had a decimal system, while the tribes of Nicaragua have a vigintesimal one by twenties, as the Basques of Spain, according to Humboldt. The Ostiacks and Kuriles of Asia would call *seven* by words expressing *three less ten;* and *eight* would be *two from ten.* The Central American Indians' *eleven* would be *ten and one. Twenty-one* would be expressed by $1 \times 20 + 1$; *fifty-one* by $2 \times 20 + 10 + 1$; *one hundred* by 5×20; and *four hundred* by great twenty.

The Tasmanians receive injustice when it is said that when they had counted up to a certain low number their arithmetical knowledge was exhausted. They had a peculiar system of calculation, and that one, perhaps, the most ancient in all the world. While some had a denary system, and gave all the digits, or a quinary, making the latter half digits out of the former half, the Tasmanians and Australians had the binary and ternary system, upon which the quinary rested. Many African tribes still reckon that way. According to Jorgenson the Tasmanians said parmery for *one*, calabawa for *two*, while cardia was for more than two. My friend Mr. Ridley gives in the Kamilarai four words for numerals: *one* being wa-kol; *two*, bulo-ara; *three*, ngoro; *four*, wa-ran. The last has the first numeral to begin with. The Wiradurei have these:—ngum-bai, bula, bula-ngum-bai, bu-ngu. Two would thus be the basis; for *three* is *two and one*, while *four* may be considered a compound of *three and one*. The Peel River tribe of New South Wales say peer, pul-ar, pur-le, for *one, two, three.*

At Moreton Bay the three are, kunner, budela, muddan, the fourth being budela-berdelu, or *two and two*. The Newcastle are, wa-kol, bulo-ara, ngorô. The Queensland Dippil are, kalim or

kinyara, buller, kurbunta or boppa: *four* would be buller gira buller, or *two and two; five*, buller gira buller kalim, or *two, two, and one.* The Parnkalla of Eastern Australia are, kuma, kuttara, kappa; the Port Jackson, ouagle, bola, broni. The Western Australia are, kine, kadura, warrang; though on the Murchison River they are cooteon and utaura, *one* and *two;* besides booltha, *many*, and boolthabat, *very many.* Elsewhere two numbers only exist; as in Van Diemen's Gulf, warat and nargarick. The Port Essington three are said to be erad, nargarick, nargarickelerad; that is, the third is made up of the first two. In Nichol Bay of the north-west they are koonjoorie, kutarra, and boorgoodo. The Tasmanian Port Dalrymple on the north had but two, pammere and katebouwe. It is somewhat remarkable that the Papuan and Tamulian numerals should be African. Mr. Logan declares those of New Guinea "are African both in system and name."

As is well known, our English system of notation was derived from the Egyptian and the Roman. The latter, though very simple, is not so easy as the primitive Assyrian given by Mr. Daniel Smith, which consists of an ascending series of wedges, or arrowheads, one being represented by a single wedge, and nine by three rows of three wedges. The observations of the learned Mr. J. R. Logan of Singapore may be here appropriately given, as affording an interesting evidence of the connexion of our southern people with the Dravirian tribes of primitive India:—"The Australian (*including Tasmanian*), and some other pre-Malagasy systems of Asonesia, are more archaic than the Dravirians, for they have not yet raised a quinary or denary superstructure on the binary foundation. Some have only the two primary terms for one and two, which are repeated for higher numbers. Others have a term for three." Elsewhere he says: "The denary system was not imported by the earliest race, whether Negro or Australian, which laid the foundation of the Indian languages, but by a subsequent race from South-west Asia, whose civilization was connected with that in which the subsequent Semitic and Iranian diffusions originated." He thought that the Todas of the hills might be the pure descendants of the very race which imported the system. He puts it in another form, and mentions that the numerals of the Dravirians of Southern India "belong to the same era of South-western Asian civili-

zation that gave birth to those improved systems, and they must have been brought into use in India long subsequent to that period of its history represented by Australian civilization."

The reader can more easily understand these passages from Mr. Logan's works after he has perused the chapter on the "Origin" of the Tasmanians. Enough has been said to prove that the Tasmanians used the system of counting for which they are ridiculed, simply because they moved off from the seat of early learning some thousands of years, perhaps, before the forefathers of the English descended into Europe, and there obtained light upon the new methods. They were not even monkeys at that remote period, if Lord Monboddo's definition of these animals be accepted, which, said he, "live in society, and build huts, but have not yet obtained the use of speech." And after all doubtless, William von Humboldt is correct in affirming, "Language must be regarded as naturally inherent in man." Numbers have furnished a test for intellectual development. Mr. Wilson supposed the dual form evidenced that stage of thought when all beyond two was an idea of vague number. An English judge acquitted a Cingalese, on a charge of murder, as *non compos mentis*, because he could not count beyond three.

If, as is believed, the Tasmanian language be so very ancient, and allied to that of Aborigines dwelling under the palms of India many, many ages before the immigration of the race who subsequently gave birth to the extraordinary Vedas some four thousand years ago, or more, how interesting would its study have proved to philologists, if only upon the idea, suggested by Professor Max Müller, that "language still bears the impress of the earliest thoughts of man, obliterated, it may be, buried under new thoughts, yet here and there still recoverable in their sharp, original outline." That true philosopher once wrote: "Man means the thinker, and the first manifestation of thought is speech."

The Tasmanians had a curious fashion, well known in other races, of changing a word upon the death of a person bearing that name. This arose from the disinclination to refer to the dead, not from an unfeeling reason, but rather from a delicacy and refinement of thought to which savages are supposed to be strangers. Once, when falling in with an old acquaintance at a corrobory in South Australia, I inadvertently asked by name

after her husband, she immediately put her hand on my mouth, assumed an air of distress and concern, with an eye askance at the Blacks near, and said, "No you say the like o' that; Blackfellow plenty growl."

This practice would necessitate the creation of new words, and so alter the vocabulary in time. Where the word was the name of an object about them, as a tree or flower, another appellation would by common consent be adopted. Dr. Milligan has a good illustration of a roundabout mode of talking. "If, for instance," said he, "William and Mary, man and wife, were both deceased, and Lucy, the deceased sister of William, had been married to Isaac, also dead, whose son Jemmy still survived, and they wished to speak of Mary, they would say, 'The wife of the brother of Jemmy's father's wife,' and so on." In another place further reference is made to this peculiarity.

The Kaffirs have a remarkable custom, which produces almost a separate language for the women of a tribe, and which is known by the word *uku-hlonipa*. "This word," observes the Rev J I Döhne, "describes a custom between the nearest relations, and is exclusively applied to the female sex, who, when married, are not allowed to call the names of the relations of their husbands, nor of their fathers-in-law. They must keep at a distance from the latter. Hence they have the habit of inventing new names for the members of the family." Such singular ways may be called a fatal form of phonetic disease. Some missionaries had been with a tribe in Central America, and succeeded in preparing a dictionary of the language. Happening, however, to remove for ten years, they found to their dismay, on their return to their old station, that the compilation was useless. Doubtless the death custom, and a sort of *hlonipa*, had been the cause. Even Dr. Milligan declares of the Tasmanians, that it "contributed materially to reduce the numbers of their substantive appellations, and to create a necessity for new phonetic symbols to represent old ideas."

Few things are more calculated to astonish a traveller than the discovery of an elaborate and orderly-constructed grammar in the language of barbarians. Du Ponceau writes: "No language has yet been discovered, either among savages or polished nations, which was not governed by rules and principles which nature could alone dictate, and human-science could never

have imagined." One cannot help sympathising with the following sentence from Sir Walter Elliot: "It was almost impossible to conceive that savages gradually emerging from utter barbarism should be able to form a structure of grammar such as is to be found among them." Though at first sight it may appear extravagant, yet the natives of Van Diemen's Land spoke by inflexions as agreeable to grammatical laws as the Greek of Demosthenes and the Sanscrit of the Vedas.

The part that savages have taken in the construction of their languages is well described by Sir C. Lyell, who says: "We cannot but look upon the result as a profound mystery, and one of which the separate builders have been almost as unconscious as are the bees in a hive of the architectural skill and mathematical knowledge which is displayed in the construction of the honeycomb." As Dr. M'Causland declared of the Aryan tongues, so may it be of the Australian family of languages, that they "have never lost their common grammatical features."

Humboldt philosophically observes: "The mechanism of inflexions, the grammatical constructions, the possibility of inversions, all are the offspring of our own minds, of our individual organization; there is in man an instinctive and regulating principle, differently modified among nations not of the same race." Du Ponceau's remark on the Leni Lenape grammar applies equally to the Tasmanian: "The whole grammatical arrangement of language, from vowels and consonants to prosody, is arranged in the savage tones of these unlettered barbarians substantially upon the same principles as in the elaborated, polished languages of Europe."

Mr. Ridley, the Australian missionary, bears this testimony to native tongues: "The inflexions of verbs and nouns, the derivation and composition of words, the arrangement of sentences, and the methods of imparting emphasis, indicate an accuracy of thought and a force of expression surpassing all that is commonly supposed to be obtainable by a savage race."

But this construction of language in Tasmania is not now to be got at. The people are gone, the early roamers with the dark tribes are gone, and no record remains. Dr. Milligan was unable to help me in my investigations. He collected words, but had no means of learning the grammar of the Tasmanians. All that can be done is to inquire into the Australian tongues—

evidently allied to the island ones—and gain our knowledge in an indirect way.

The points of Australian grammar are so well described by my old friend Mr. Moorhouse, the late Protector of Aborigines in South Australia, that I will simply quote his words:—

"The term dialect is scarcely applicable to the languages of New Holland. They differ in root more than the English, French, and German languages differ from each other; and if natives of one language happen to meet those of another, they are obliged to converse in English to make themselves understood. Not one-twentieth part of the words agree in root; and yet there is evidence sufficient to satisfy any one that they belong to one family, and had their origin from one common source. They resemble each other in having suffixes or particles added to the terminal parts of words, to express relation; dual forms of substantives, adjectives, and pronouns; limited terms, being only five, for time, distance, and number; no sibilant sounds; no articles; no auxiliary verb; no relative pronoun; no prepositions; no distinctions in gender; no distinct form of the verb to express the passive voice."

The grammar of the Tasmanian is one not easily to be described, because a right appreciation of such must be the result of elaborate investigation and years of residence and study. Even our best authority, Dr. Milligan, is open to objection, according to Mr. Edward Burnet Tylor; for that author remarks: "The objection to trusting native information as to grammatical structure may be seen in the difficulty, so constantly met with in investigating the languages of rude tribes, of getting a substantive from a Native without a personal pronoun tacked to it. Thus, in Dr. Milligan's vocabulary, the expression *puggan-neena, noonal-meena,* given for 'husband' and 'father,' seem really to mean 'your husband,' 'my father,' or something of the kind."

The trouble experienced by those who have reduced to grammatical forms some of the Australian languages has been obvious enough. To show, however, the identity of construction, the Rev. W. Ridley, M.A., says: "I found in two languages of Queensland, spoken at Moreton Bay and Wide Bay, the verbal inflexions correspond in purport with those of Lake Macquarie and the tributaries of the Darling." That excellent missionary speaks of an aboriginal voice of a peculiar character, which he

termed the *permissive*, and which he describes as "an inflexion giving the verb the sense of allowing the act (specified by the root) to be done." Generally speaking, those languages of the continent and of the island are said to have the intensive, causative, and reflective voices of the Hebrew, and, in addition, the permissive and reciprocal voices. The Rev. L. E. Threlkeld, in his grammar of the Lake Macquarie district, conceives that he can distinguish fifteen voices. They are these:—active, transitive, active-intransitive, active-transitive-reciprocal, continuative, causative by permission, causative by personal agency, causative by instrumental agency, effective, neuter, double, privative, imminent, inceptive, iterative, and spontaneous. He gives six tenses, and eight participles. He mentions that "it depends on the use of a word, whether it should be denominated a noun, adjective, or adverb." The conjunctive mood answers the purpose for which conjunctions are usually required.

Messrs. Teichelmann and Schürmann divide the South Australian verbs into primitive, derivative, compound, and reduplicative. All the verbs there end in *ndi* or *ni*. They give as genera of verbs, the neuter, the active, the causative, and permissive, the inchoative, the derivative ending in *rendi*, and the reduplicative. They, also, admit that the adverbial sense is not confined to the few real adverbs, but is expressed by substantives and adjectives. In Encounter Bay the Blacks added *warr* to an adjective to form their adverb. The Rev. H. A. E. Meyer, Lutheran missionary to the Aborigines, notices a curious duplex form of the verb: thus, *ngate-yan lakkin*, and *ngap-il lagglin*, for "I spear him."

Mr. Matthew Moorhouse of Adelaide says of the verbs: "They are all attributives, whose conjugations, moods, and tenses are marked by inflection." There are, therefore, no auxiliary verbs. His illustration of a simple verb will serve to give the common forms of the language:—

"*Present Indicative*, nganna parldkun, I strike. *Dual*, ngedlu parldkun, we two strike. *Plural*, ngennu parldkun. *Imperfect*, parldka. *Perfect aorist*, parldkul. *Future*, parldla. *Imperative Mood*, parldka. *Conditional Mood*, parldkunna. *Prohibitive Mood*, parldkümoi. *Preventive Mood* (lest he should strike), parldkulmunnainmudl. *Optative Mood*, parldla. *Infinitive Mood*, parldlappa. *Past Participle*, parldkulmungko." Mr. Moorhouse

adds: "The existence of an active nominative supersedes effectually the necessity of having a form for a passive voice." Mr. Schürmann gives the following gerunds: wittilidni, *spearing;* wittintingi, *in spearing;* wittinturlungu, *during spearing;* and wittintyaranga, *on account of spearing.*

The personal pronouns are so singular, that a few illustrations are necessary to understand them. In South Australia we have these:—

Sing. Nom. ngape, *I*; gen. ngaiyo; dat. nganne; acc. ngape; ad. nom. or abl. nganna. *Dual.* Nom. ngedlu; gen. ngedlango; dat. ngedlunno. *Plural.* Nom. ngennu; gen. ngennango; dat. ngennunno.

The Rev. L. E. Threlkeld observes: "The primitive or personal pronouns in the first, second, and third persons singular are distinct from the pronouns when used to the verb, and as such are used by themselves in answer to an interrogative. The strictest attention is absolutely necessary to the pronouns in all their persons, numbers, and cases: by them the singular, dual, and plural numbers are known; by them the active, the passive, the reciprocal, and reflective state of the verbs are known." "The dual number has a case peculiar to this language—namely, a nominative and an accusative case conjoined in one word; as though the English pronouns I and thee, thou and him, &c., could be used I-thee, thou-him, &c.: but the pronouns are distinct from those used for such persons in their other respective numbers."

The subjoined will illustrate the declension of an Australian noun.

Sing. Tinyara, *a boy;* gen. tinyarunna; dat. tinyaranni; abl. tinyarurlo.

Dual. Nom. tinyarurla; gen. tinyarurlakko; dat. tinyarurlanni.

Plural. Nom. tinyaranna; gen. tinyarannakko; dat. tinyarannanni.

A Murray River word for *man* runs thus:—

Sing. Nom. meru; gen. merining; dat. merininnanne; acc. muru; abl. merinni, and merinnaimmudli.

Dual. Nom. merakul; gen. merinnimakul; dat. merinnakullamanno; acc. merakul; abl. merinnakullamanne, or merinnakullamanmudl.

Plural. Nom. mera; gen. merinnarango; dat. merinnaramanno; acc. mera; abl. merinnaramanno, or merinnaramainmudl.

The general arrangement of the Lake Macquarie language of New South Wales may be understood from the following literal transposition of words to form the Lord's Prayer. It is not necessary to give the native formula:—"Father our up in heaven in art. Let caused be thy name thy sacred for to be. Let to appear king belonging to thy; let to obey word thy. As earth it is to be, as it is heaven it is to be. Give to us day to be as to be it is to continue for to eat. And cast away our evil that is done as it is we cast away all that those who have spoken, privative of fulfilling, belonging to us. And guide do not us evil causes to do one who towards cause to deliver us evil it is from: because it is thine it is king belonging to and bright shining thus to be it is to continue always. Amen."

In the construction of Australian tongues we have a good illustration submitted by the Rev. W. Ridley in his Kamilaroi reading-book. Thus:—"God everything sees.—Not good man alone for to dwell; I for man woman will make.—I them dead will smite.—Not went Immanuel.—A stone the grave covered.—They verily her to be dead know.—God angry is.—Not he could walk."

The Port Macleay rendering can be detected from some translations of the Rev. Geo. Taplin. This is one from the 22d verse of the 14th chapter of Matthew.

"Yaral yonguldye Jesusald ngaityar moru'an mungkulangk yukungai. Yun itye prakkin grauwe maiye; yun itye winmin grauwe ule. Wunyar nakkin ityan Jesuse, ngoppun itye ulawar. Wunyar kinauwe ngaityar yarnin luku. 'Ngang itye.' Kar nuntun ityan brupe. Nowaij ar nuntun ityan ellin Jesuse."

The construction of the language of a kindred people to the Tasmanians, that of the New Hebrides, may be presented in a translation from the beginning of the 5th chapter of the Second Book of Kings.

"1. Is anainjinaig ilpu uesupo o natimarid Siria a Neaman, is lep aktaktai upene vai yin a natimi alupas o un, um eccen vai vin, nikavaig is imiatamaig inpece Siria iran a Ihova: is lep esjilid nemba a un an nedoa, ja is atimi lepros aien.

"2. Eris mun apanniji ira atimi irai nupu Siria, um ahneg

nalvatahaig is ethi an pece Isreel, is um aheca o ehgai Neaman aien."

The reduplication of words, so strongly developed in the New Zealand language, with its keri-keri, mata-mata, &c., has been supposed an evidence of a low condition of race. If the view be correct, that people using it most should be the lowest in the scale of humanity. Certainly the European tongues are almost wholly free from reduplication; the English, French, and German presenting each but two or three instances out of a thousand, and the ancient Greek but two. On the other hand, the proportion in the thousand words has been observed to be seventy with the Darien Indians, seventy-three with the Hottentots, one hundred and sixty-six with the Tonga Islanders, and one hundred and sixty-nine with the Maories. Curiously enough it has been asserted that the Murray Islanders of North Australia, and the Australians proper, had thirty such; thus giving them a much higher rank in the scale than the polished South Sea Islanders. Mr. Logan noticed that some of the plurals of Australian words were formed by reduplication of the word or syllable.

The reduplicative is an alteration in the meaning of a primitive word: thus, kutpandi, *to shake*, into kutpakutpandi, *to shake quickly;* karro, *blood*, becomes karrokarro for *red*.

Upon the examination of six hundred words in the tongue of the Lake Macquarie tribe, I found but the following true reduplicatives:—Kirákira, mokulmokul, bulbul, kiakia, kurkur, kulbunkulbun, pultulpultul, palpal, warinwarin, tolongtolong, weirweir, and woroworo. Two per cent. were of this class. Looking then over two thousand one hundred words of the vocabulary of the Adelaide tribe, I found but sixteen true reduplicatives, viz. bilyabilya, bukkibukki, bukkobukko, burkoburko, karrokarro, koko, mannimanni, marngomarngo, mukamuka, murromurro, palpapalpa, tarrotarro, wadnawadna, warrawarra, wattewatte, and yeltayelta. There are, however, forty-two others which are compound, and partly reduplicative; as, mukamukarendi, kabbakabbandi, kaltikaltinye, mangkimangkiappendi, &c.

But when one comes to the Tasmanian language, a remarkable change appears. For, instead of having one hundred and sixty-nine reduplicatives in a thousand words, as the Maori has, I have found but *one* instance—the word monta-monta. It is true

there are three others of doubtful origin, because caught by the ear of the passing French voyager, who may have got the word repeated by way of emphasis. There are, also, these slightly reduplicatives:—poporook, mamana, anamana, tarrara, mienemiento, papalawe, and kakara; with a couple of double words, rulla rullanah and poora poora-nah. After running through vocabularies containing about twenty-five hundred names, it is certainly astonishing to find so few. If, therefore, as some have thought, the intellect of a people should be gauged by the proportion of reduplicatives in their language, the Tasmanian would stand near the summit of human intelligence, and the Maori at the base.

The points of difference among the languages spoken in Tasmania early attracted attention. When Mr. Robinson boasted of his skill, it must be understood that he still depended upon native interpreters in seeking conference with other tribes, though tolerably conversant with the tongue spoken by his guides from the south of the island. He even declared: "The different tribes spoke quite a different language: there was not the slightest analogy between the languages." When a captured woman from Cape Grim, to the north-west, was brought to Flinders, it was found that she was as ignorant of the dialect of the rest as they of hers. It was this ignorance of each other's language that kept alive those tribal jealousies and antagonisms, which so often threatened the peace of the Strait settlement. When, however, they had constructed, by force of circumstances, a sort of *lingua franca*—a common language—their friendship grew, and local feeling improved. Mr. Clark, the catechist, thus wrote to me of the condition of linguistic affairs then: "The languages spoken were different; so much so, that, on my first joining them in 1834, I found them instructing each other to speak their respective tongues. There were at one time eight or ten different languages or dialects spoken by about two hundred persons who were domiciled at Flinders."

The same verbal dissimilarity is observed elsewhere among kindred peoples. Mr. Earl, when referring to the wild tribes of Borneo, says of their dialects, that they "were often unintelligible to the people of the district immediately adjacent." Mr. Forster, in his valuable "Voyages," mentions that "the languages of the black races of the islands there do not agree." I heard

the Bishop of Melanesia declare his belief, that on each of the two hundred isles of his missionary-diocese a different tongue would be heard. Eight boys were gathered at his College in New Zealand from the New Hebrides, Solomon's Isles, &c., and all spoke differently from each other and from the Maories. Speaking of the Oriental Negroes, the learned Mr. Crawford affirms: "That they have no common language is made evident through a comparative vocabulary of seven of those Oriental Negro tongues; whence the unavoidable conclusion that each is a distinct language." Dr. Latham said of islanders of the East: "None of their dialects are intelligible to any Australian."

The following illustrative changes may be given from some of the tribes of Victoria. The sun is called *met-e* at Corio; *na* at Colac; *derug*, west of Colac; *now-an*, on the Goulburn; *yourugga*, at the Murray and Goulburn junction; and *now-wer*, west of the Campaspe. In the five dialects to the north-west of the colony, the same object is known by the several names of *mirri*, *nowe*, *nowee*, *nowe*, *niammi*. The boomerang in these latter contiguous tribes is called *wangim*, *tatim tatim*, *tatoom*, *waru wangim*. It is said that, of 340 languages of South America, nearly 300 are different in idiom.

But this dissimilarity is confined to the vocabulary. Mr. Robinson's "no analogy" must be so understood. The Bishop of Melanesia is careful to tell us that the eight languages of his eight boys differed in words only, not structure. Mr. Jukes saw strong grammatical affinity between the Tasmanian and Australian, but stronger still between the Tasmanian and the New Caledonian languages. Gabelentz regards the Fiji, New Hebrides, and Melanesia generally as being of one stock of language. Mr. Marsden, in his "Sumatra," uses the word sisterhood to denote the relation of the dialects. The Banuas of Malaya have a language similarly constructed to that of the Papuans of the isles, but quite unlike the Malay, Arabic, or Hindoo. Sir Stamford Raffles imagines that one language originally existed from Madagascar to the South Seas. Sir C. Lyell contends that we have evidence of no appreciable change in some languages for three or four thousand years. M. A. Maury affirms: "There are grounds for looking for proof of relationship between the Africans and the Oriental Negroes in their linguistic affinities." Mr. Ridley thus speaks of Mr.

Threlkeld's Grammar of the Lake Macquarie in New South Wales: "Though not one word in a thousand in Kamilaroi resembles that district, I already perceive important points of resemblance in grammar."

A few words may be added, from authorities, as to the connexion of the Tasmanian with the general family of languages.

Professor Max Müller gives three categories of speech. There is first the *Radical*, and monosyllabic; as the Chinese, one of the most primitive *family* languages. The second is the *Terminational*, in which two or more roots coalesce, so as to form a word; one of which retains its radical independence. This is called by some the *Agglutinate*, and, by others, the *Turanian* languages, as the Turkish, &c. The third is the *Inflectional*, in which roots coalesce, so that neither one nor the other retains its substantive independence. These would form the *Iranian* order, as Hebrew, &c. Max Müller has this important observation to make on these: "As far as the formal part of language is concerned, we cannot resist the conclusion, that what is now *inflectional* was formerly *agglutinate*, and what is now *agglutinate* was at first *radical*. The great stream of languages rolled on in numberless dialects, and changed its grammatical colouring as it passed from time to time through new deposits of thought." Dr. Lepsius considers, also, that the monosyllabic tongues grew to be agglutinate. Bopp affirms that the inflexional languages were once agglutinate.

The great dissimilarity of these leading families of languages excites astonishment. The learned American philologist, Dr. Dwight, says: "The Semitic languages differ widely from the Indo-European, in reference to their grammar, vocabulary, and idioms." As Englishmen, we connect ourselves with the Aryan or Indo-European, and trace our language, with Latin, Greek, Celtic, and Zend, to the Sanscrit of India. But the latter had no localization in that peninsula, when the forefathers of the Tasmanians were related to the continental family. But the question immediately arises, "What is the mother of the Sanscrit?" M. Omalius d'Halloy has some judicious remarks upon the subject. "Had," said he, "the ancestors of the Europeans known how to write, there could probably have been found another language from which our own are derived, so that instead of their being the daughters of the Zend, the grand-

daughters of the Vedic, and the nieces of the Sanscrit, they would only prove to be very distant relations."

But it is time to close this line of argument by quotations from the pamphlets of Mr. J. R. Logan, of Singapore, who has written with so much ability upon the relation of our Australian and Tasmanian tongues with those of the primitive inhabitants of India. A selection from his work must be sufficient, as space will not permit of further remarks.

Mr. Logan declares: "The Australian proves that the primary Ugro-Dravirian formation prevailed in South-western Asia, including India, at a barbarous epoch, prior to the expansion of the simple numerals 1, 2, 3, into higher binary and ternary terms by combination and acquired fluxion."

He gives the character of population in South-western Asia and Asonesia thus: 1st, the Archaic Indo-Australian; 2d, the Papuan; 3d, the Tibeto-Chinese or Ultraindian; 4th, the Dravirian; 5th, the Scythian; 6th, the Iranian; 7th, the Semitic. Old, therefore, as is the Chinese language, the Draviro-Australian is next in antiquity to it. He considers "the physical evidence of a community of origin for the monosyllabic races and the Tartarian, Tibeto-Indian, and lank-haired Asianesian races are exceedingly strong, and almost conclusive of themselves." Drawing a distinction between the Tonic or Monosyllabic and the Harmonic or Dissyllabic, he proceeds to enunciate the same truth as Max Müller, of transition of the Radical into the Agglutinate, in these words: "I believe that the passage of the Tonic into the Harmonic is a natural one, while I am not aware of any law that will admit of the conversion of a polysyllabic into a monosyllabic language."

As to the question of varied vocabulary, Mr. Logan thinks that "in most of the islands of Asianesia there is diversity of vocabularies combined with an agreement in idiom." "In the primary Draviro-Australian era," he says, "the number of distinct vocabularies and independent synonymous roots was probably very great."

"The phonetic elements of the Dravirian formation," he declares, "are numerous, and some of them have a somewhat African and Australian character." Post-placed particles are common. In most of the southern, and several of the middle languages of Africa, every syllable ends in a vowel, having much

of the softness of the Southern tongues. Something of the Hottentot *cluck* has been detected in North Australia. Again he remarks: "All rude languages are pleonastic. In Australia (*including Tasmania*), Polynesia, America, &c., the pleonasm is undisguised. In the Indo-Germanic languages it has been lost or refined into abstract flexions. In the African families it is in middle stage."

The Dravirians proper made some advance in civilization, even in maritime affairs, before the inroad of the Aryans to the valley of the Ganges, but after the great migration to which the Australian, Papuan, and Tasmanian belonged. The aptness of the South Dravirians to substitute Prakritic words for aboriginal ones has been remarked. Upon the difference of roots in the Dravirian and the Australian Mr. Logan has this interesting suggestion to offer:—

"This arises from the former being only the last continental, and the latter the last insular, remnant of a once continuing and widely expanded family, that was early disjoined, and has ever since been subjected in its two divisions to the influence of formations of opposite character,—the Scythico-Iranian, tending in the continental division to give a more flexional development to the primary structure which it has in common with them; and the Niha-Polynesian, tending to arrest the natural flexional development and concretion of the insular division, and to maintain the archaic crudeness of the type while partially transforming it."

This gentleman gives Mr. Norris the credit of being the first to observe the resemblance between the Australian and Dravirian pronouns. The first person, *I*, is thus rendered: Chinese, *ngo;* West Australian, *nga-nga* and *nga-nya;* New South Wales, *nga-toa;* Adelaide, *nga-ti;* Murchison River, *gni;* tribe near Adelaide, *ngaityo;* Encounter Bay, *nga-pe;* Port Lincoln, *ngai;* Murray, *ngappo;* Murrumbidgee, *naddo;* Lower Murray, *ngape;* Hunter's River, *ngatoa;* Khond of India, *na-na;* Malayan, *nga-n;* Tamil, *ya-na;* Sontal, *inge;* Sunda, *aing;* Timor, *ani;* Sumba, *ngu-nga;* Formosa, *ina;* Thibet, *nga;* Burmese, *ngai;* Korea, *nai;* Sioux, *ne;* Shoshone of West America, *ni;* and Chinook Indian, *nai.*

"In Australia," continues Mr. Logan, "the pronominal roots are compounded with definitives, singular and plural, with the

numeral 'two' to form duals, with masculine and feminine definitives in the third person, and in all the three persons with each other; thus producing not only absolute and relative plurals of the first person, but several other complex plurals." It is singular that the Hottentot should, also, have a double plural, one common and one particular, and a double first person plural. Mr. Logan connects the languages, saying: "The Draviro-Australian or Archaic Indo-Asonesian pronomalous system, with its numerous distinct elements and combinations, appears to be more ancient, or less impaired, than most of the systems of other Harmonic formations of the Old World. From its general structure it must be considered as cognate with proto-Scythic, or Scythico-American. It is richer than Scythic, which has neither sexual forms, nor any plurals save the ordinary generic ones."

In the Australian system the plurals are formed like the ordinary Dravirian ones, by the plural postfixes, the Dravirian special *m* plurals being absent, unless they are represented by *wa*. The Australian, he shows, has a distinct dual formed by a Draviro-Australian plural particle *li, le, dli*, &c. The Tibeto-Ultraindian pronouns are themselves radically the same as the Draviro-Australian. The Draviro-Australian is not, however, derived from the Tibeto-Ultraindian, but each had an independent connexion with an archaic Midasiatic system—Chinese in roots, and Scythic in form. "The chief difference," says Mr. Logan, "between the Tibeto-Ultraindian and Draviro-Australian systems consists in combinations, agglutinations, and flexions, which are found in the latter." He regards the Australian subformation to be the most ancient in Asonesia.

Resuming his subject, Mr. Logan adds: "In the Australian system we find not only the forms which are now extant in South Dravirian, as well as the dual, and the peculiar transition or agento-objective forms of Kol, but several others produced by the same power of compounding elements in which these originated."

It cannot surprise one to hear him argue for "the high antiquity of the movements which dispersed the Dravirian pronouns on all sides, from their probable centre in South-western Asia. The Chinese is probably the most ancient integral formation to which they can be referred. They appear to have been diffused over a large portion of Asia and Africa, as well as over

America, prior to the rise of the dominant historical races; and their being spread over India, Ultraindia, and Asonesia, in the era of Draviro-Australian civilization, now represented by the Australians, throws light on the ethnic condition of South-western Asia, at the period when a civilization of this character was connected with the most influential and diffusive formation. The roots only are Chinese, &c. The Dravirian and Asonesian forms of the pronouns show that the languages of this formation had already acquired a harmonic and postfixual character."

"The general conclusion," then remarks our interesting writer, "is that the Draviro-Australian pronominal system is not an offshoot from Scythic proper, or from any of the other Aso-African systems, but is a remnant of the proto-Scythic era of the Harmonic development, and a link between the Scythic and American idealogues, and between Chinese and American. In America the crude and pleonastic ideology of the early monosyllabic stage is preserved under a harmonic and agglomerative phonology. In the Australian condition of Draviro-Australian the pronoun system retains the same combination to a large extent." Again he says: "The Draviro-Australian, unlike the Scythic and Caucasian formations, distinguishes the gender by some of its postfixes. The three existing branches of the Draviro-Asonesian family, the Dravirian proper, the Kol, and the Australian, have each had an independent development, and been exposed to widely different influences, internal and external, from a very remote period."

The final statement of the learned scholar is that "the Australian pronominal system is the most crude, redundant, and agglomerative, and the least flexional."

The vocalic character of the Papuan languages differs in places. Mr. Logan thus compares some of them: "The Western New Guinea, the Australian, Tasmanian, and New Caledonian, are in general highly vocalic, the Tasmanian and some of the Australian being purely vocalic in their finals." Again, after mentioning that the Pelew tongue has 60 per cent. of final consonants, the Radak 70, Torres Strait 70, Lobo 14, Point Dory 65, New Caledonian 20, and Waigiu 9, he declares the Northern Australian far more consonantal than the Southern, and the Western than the Eastern. He closes thus: "The Tasmanian and South Australian languages in the south, and the Limba

Apiu in the north-west, are purely vocalic. The western, eastern, middle, and a few of the northern languages of Australia are vocalic." The nasals are reckoned at 40 per cent. The *ng* sound is altered to *kn* in Borneo. While the Australian and New Caledonian know not the sound of *s*, it is found in other Melanesian regions. The *h* is present in New Caledonian, though absent in the Australian. Some noticed a parallel sound in the Tasmanian and the speech of the Hill-men of India. Dr. Reinhold Rost assures us that the latter use sounds unknown in Sanscrit. On Mr. Logan's authority we learn that "the languages of Tasmania appear to connect the Australian with the East Papuanesian."

The Papuan family of languages may be styled both vocalic and prepositional. The Polynesian is more monosyllabic and less complex and agglutinate, and has been termed "the least Turanian of the Tibeto-Indian languages." As the Tasmanians are said to have had words for every tree and fish, but no generic word for *tree* and *fish*, so do we observe a lack of general ideas in Polynesia. There they have appellations for dog's tail and bird's tail, but no word for *tail* itself. The English had to go to the Latin for the word *colour*.

Dr. Milligan writes thus on the subject: "They possessed no words representing abstract ideas; for each variety of gum-tree, or wattle-tree, &c., &c., they had a name, but they had no equivalent for the expression 'a tree:' neither could they express abstract qualities, such as *hard, soft, warm, cold, long, short, round*, &c.; for 'hard' they would say, 'like a stone;' for 'tall' they would say, 'long legs,' &c.; and for 'round' they said, 'like a ball,' 'like the moon,' and so on, usually suiting the action to the word, and confirming by some sign the meaning to be understood."

The ignorance of Tasmanians and Polynesians of letters is not to be wondered at, when Mr. Crawford says: "No race from the Euxine to the Atlantic, or from Greece to Scandinavia, has ever invented an alphabet." Both families of language suffered from the change of vocabulary, by the death of persons bearing a name which belonged to some natural object. The Yezidis, or devil-worshippers, anxious to preserve the name of their Sheitan, suffer no child to bear a name anything like that word.

At one time the Tasmanians were supposed to speak a tongue

unlike any other in the world. Possibly this was on account of their distance from Babylon; for Kaempfer thought the Japanese ran so fast and so far from the Tower of Babel as to speak at last quite different from the rest. But our mode of learning the nature of aboriginal languages is proved valueless when dependent upon the chance-selected vocabularies of travellers, who may possess most varied conceptions of Tune and Time. Balbi notices the "gross and ridiculous mistakes" of Labillardière, who formed, by the way, the first Tasmanian vocabulary. Mariner informs us that in the Tonga that naturalist understood a word for number which really meant a part of the body. The missionary Threlkeld speaks in the name of his fellow-evangelists when he says: "Cook's vocabulary of the Tahitian language, as well as those of other collectors of words, afford us, who are acquainted with these tongues, a fund of amusement."

Of the vocabularies of the Tasmanian tongue, the best and latest is that prepared by Dr. Milligan, the last guardian of the Tasmanians. His difficulties were these: he had no previous knowledge of the people before they had been reduced to about fifty, he found them confused in tribes and speech, and he saw them demoralized in mind and body. He himself acknowledges the probable defects of his collection. His credit lies in doing more with less means than any one else has done. He has given nearly two thousand words. The next in importance is the collection by the eccentric Dane, Jorgen Jorgenson, containing over four hundred words. He was acquainted with the Blacks in their wild state, and his vocabulary, as far as it goes, is reliable. One was prepared by M'Geary, who knew, perhaps, more of the habits of the people than any man but Robinson, which was appropriated by Dr. Lhotzky, and most of it may be seen in the *Geographical Society's Journal*, vol. ix. Mr. Sterling, who for some time had charge of a Black-station, near Hobart Town, laboured a long period upon the preparation of a vocabulary. At his death, his papers were carried off, and were afterwards lost. The Rev. Thomas Dove, catechist on Flinders Island, made a small collection. Those lists prepared by the French and English voyagers are, as usual, of little service. Mr. G. A. Robinson, so long with the Natives, might have done most for science, and did least.

As the reader has been informed, there were at least four

tribes speaking different dialects in the island. Mr. Robinson declared there were many others. Conscious of the difficulty of entering upon the conflicting stories of various authorities, I content myself with the selection of a few words only, and give the author as far as he can be ascertained. The names of Aborigines may be seen in "The Last of the Tasmanians," in the chapter on Flinders Island.

The word *sun* is rendered, by Dr. Milligan, pugganoobra-nah, or pùkkanebrenah, in the east; pallanubra-nah, in the south; panubrynah, or tonah leah, in the west and north-west; by Mr. Surveyor Scott, pugguleena; by Mr. Dove, loina and paganooboya; by Labillardière, panubere; by another, workalenna; and by Jorgenson, east, petreanna; north, loyna; and west, nabageena; and by Geary, piterina.

Moon, by Milligan, is, east, wiggetena; south, weetah; west, weenah leah; by Scott, ooeta; by Dove, weipa and weedina; by another, luina; by Labillardière, vena; by Jorgenson, east, lutana; west, weena; north, webba; by Geary, vena.

The verb *come*, by Milligan, is, east, talpeyawedeno, or tallyalea; south, tutta watta; by Dove, tarrabilgie, togannera; by Scott, tialleh; by Jorgenson, east, tepera; west, ganemara; by Geary, tipera.

The word *kangaroo* is rendered, according to kind, by Milligan, east, lyenna, tumnanna, nawittyé; south, lena, rarryna, tarra na; west, ku leah, piaclumné, tarra leah; by Captain King, west, ragnar; by Péron, lelagia; by Dove, lurgu, lenna, lemmook; by another, lathakar, leigh; by Jorgenson, south, lalliga; by Geary, lila.

Hand, by Milligan, is, east, riena; south, reemutta; by Dove, reegna; by Labillardière, rilia; by others, ri, riri; by Jorgenson, east, anamana; north, rabalga; by Geary, anamana.

Ear, by Milligan, is, east, mungenna; south, wayee; by Dove, towrick; by another, blatheraway; by King, west, gounreek; by Labillardière, cuegnilia, vaigui, ouagui; by Jorgenson, east, pelverata; west, lewlina; north, cowanrigga; by Geary, pitserata.

Eye, by Milligan, is, east, mongténa; south, nubré, or nubrenah; by Dove, south, leemanrick; by King, west, namnurruck; by Labillardière, nuberé, nubamibere; by Jorgenson, east, lepena; west, pollatoola; north, namericca; by Geary, lepena.

Nose, by Milligan, is, east, mununa; south, muye or muggenah;

west, muanoigh; by Péron, mugid; by King, dleoun; by Dove, rowick; by Labillardière, mongui-mongui; by Jorgenson, west, mena; north, rawarriga; by Geary, minarara.

A little poetry may be seen in the Bruni Island dialect. Thus, nubere is the *eye;* pa, the *heavens;* and pa nubere, the *sun,* or *eye of the heavens.*

Some of the Tasmanian songs have been collected by Jorgenson, Milligan, and others.

"Kolah tunname neanyme,
Pewyllah pugganarra;
Roonah Leppaka malamatta,
* * * Leonalle.
Renape tawna newurra pewurra,
Nomeka pawna poolapa Lelapah,
Nongane mayeah melarootera,
Koabah remawurrah,"
&c. &c. &c.

"Poo-ye-Carne-koon a meta
Num ba keta-rel-ba-ena
Too-ya-wa-ta loo-ta-war-ra.
Koon-a-meta pau-ta-war-ra.
A-ka-la-Leba-Jony-eta
A-ka-ba-mar-keen-a."

"A-re-na-too,
Ket-a-ta-e-vepa.
Meb-re pa-too.
A-re-na-too."

"Ne-par-me-ry-wa.
Ne-Cat a ba wa.
Ne-par-me-ry-wa.
Ne-Cat a ba wa."

"Taby-ba-Tea, mocha, my boey-wah!
Taby-ba-Tea, mocha, my boey-wah!
Taby-ba-Tea, mocha, my boey-wah!
Loma-ta-roch-a-ba-long-a Ra.
Loma-ta-roch-a-ba-long-a Ra."

The admixture of slightly-changed English in the last will strike the reader.

Mr. Surveyór Scott collected a few sentences :—

Give me one stone.—Lona tyennabeah mito.
Sing a song.—Lyenné riakunna.
Where is your father?—Ungamlea nangéena.
The woman makes a basket.—Lowanna ollé tubbrana.
The child is small.—Malangeebeah.
Cut down the tree.—Ungana puyé loté.
The moon is behind a cloud.—Ooeeta toggana warratena lunta.
He sees with one eye.—Taggunnah.
He is a bad man.—Tagantyaryack.
The swan swims in the water.—Kalungunya tagumena liyetitta.

The following is given by Jorgen Jorgenson :—"Mena mulaga laveny powa parmera, tara, lathakar catebewy probylathery pamery haminen trairna pooty lapry patrola pomely pooty kibby mena leprena mena." The interpretation of which is :—"When I went hunting, I killed no less than one wallaby, one kangaroo, two badgers, and one black swan, and being hungry I felt in my pocket for my fireworks in order to make a fire, and cook some of my game; but I found none. I therefore had to walk home before I broke my fast." "I love you" was rendered in Tasmania, "mena loyeten nena."

"Mena lapey lucropay taikay penituta moiha caity manuta" means, "I see a vessel on the water sailing fast, but she is a long way at sea."

It is mentioned that the letters *t*, *s*, *u*, *x*, and *z* are wanting.

On September 17, 1833, Mr. Wilkinson wrote thus to Governor Arthur, in Hobart Town: "I have translated into the language of the Ben Lomond tribe of Aborigines the principal parts of the first chapter of Genesis." The arrangement of this work presented to the reader is taken from the manuscript copy of Jorgenson's prepared for Dr. Braim, and kindly given to me by the latter, when he was officiating as the much-esteemed Archdeacon of Portland, in Australia. Mr. Milligan's key will not fit Mr. Wilkinson's copy, but Jorgenson's will. The translation is judiciously divided into short passages.

1. In the beginning God created the heaven and the earth.
   Trota, Godna pomale Heavena, coantana.

2. And darkness was upon the face of the deep.
Lewara crackne.

3. God said, Let there be light: and there was light.
Godna carne, Tretetea, Tretetea crackne.

4. And God saw the light, that it was good: and God divided the light from the darkness.
Godna capra Tratetea Lewara.

11. God said, Let the earth bring forth grass: and it was so.
Godna carne coantana, nigane Rothana Rotana tibre.

16. God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also.
Godna pomale Cathabewa, Tretetea lackrana, wakalenna, Narra pomale Purlanna.

17. God set them in the firmament of the heaven to give light upon the earth.
Godna propara narra Weaticata Tringane tractea.

21. God created great whales, and every living creature that moveth, which the waters brought forth abundantly.
Godna pomale lackrana Penungana, cardea Penungana.

25. And God made the beast of the earth: and he saw that it was good.
Godna pomale Pauala, Illa, Tabela, Sheepana, Godna capra narra coopa.

26. And God said, Let us make man in our image, after our likeness.
Godna carne, mena pomale Wibeebicka mena.

27. And God created man in his own image.
Godna pomale Wibalicka narra.

31. And God saw everything he had made, and behold it was very good.
Godna capra, cardea narra pomale, narra carne, narra coopa! coopa!

CHAPTER XIII.

SUPERSTITIONS.

I AM conscious of treading upon tender ground in treating of such a subject; and, perhaps, of exposing myself unwittingly to misconstruction. My honest desire is to give the reader the simple result of inquiry and investigation, and seek rather to present facts than indulge in hasty generalizations, or propound any individual theory. The judicious reader will perceive the necessity for the publication of some information, bearing upon the superstitions of the Natives, which does not come within the ordinary scope of popular literature. The ethnologist, or anthropologist, who desires the knowledge of a law affecting human thought, will interest himself in matters which by the mere outsider may be viewed as indelicate or trivial.

A long residence, an intimate relation, and an accepted sympathy, with Aborigines, would be as essential to a revelation of their feelings, as to an appreciation of their character. The man of reading, conversant with the habits of barbarous peoples, would be the most capable of deciphering the scarcely legible characters of hoary superstitions; and the philosophic mind might connect these fragmentary letters with similar observed records of other countries and other times, and so unfold the mysteries of a common faith.

Let us, then, gather up the Tasmanian fragments which remain. Let us look at well-attested peculiarities of tribal thought, compare these with the better-known superstitions of their Australian neighbours, and observe the relation of the whole with the long-standing, time-honoured practices of other races in various parts of the world.

Instead, then, of despising the absurd notions of the uncivilized, we might study them to some profit, as exhibiting the progress of thought, and as testifying to the gratifying

WILLIAM LANNE, THE LAST MAN

(*Photographed by* Mr. C. A. Woolley, 1866.)

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doctrine of man's earnest longing for something beyond his outward being, something higher than his present condition. The Melbourne phrenologist, Mr. Sohier, gives the Papuan race little credit for aspiration, thinking that "hopeful and striving, looking to a better future, hardly exist in their minds." Mr. J. Bailey, speaking of the Tasmanians' kindred—the poor Veddahs of Ceylon—has a better feeling about their superstitions, as pointing "to something long past, to a faith once, at least, familiar to them, but now forgotten." This is assuredly a kinder way of regarding them. It must be borne in mind that our want, as civilized Europeans, of comprehending their mental processes, or sensibly appreciating their views of things in general, will ever operate as a barrier to our intercourse with them, and prevent us doing adequate justice to their traditions. Mr. Logan, of Singapore, wisely bids us remember that "in most, if not all, European nations at this moment, every kind of spiritualism may be found, from the purest and truest, down to superstitions as gross as any which prevail in the Indian Archipelago."

It is certain that many things co-operate to induce our belief that the Tasmanians had some dim apprehension of a future state. Who can say that He who never left Himself without a witness might not have shone into the souls of some of these dark tribes, and so quickened their natures, that, as they passed away, they could dream of purer life beyond the grave?

There are those who talk of man's inability to conceive of a God unless trained to accept of the notion. To such it is no matter of surprise that the Tasmanians knew nothing of God, as they had never been taught. While some assert that the comprehension came only by direct revelation, others suppose it obtained by the operation of intellect, independent of religious teaching.

It is said that, in the early times of our Indo-European races, there was no knowledge of the Supreme. Max Müller indicates this from an examination of the Vedas, which had hitherto been thought to proclaim it. Then, again, the most ancient building in the world, the Great Pyramid, is silent about a faith. The absence of writings or paintings upon its walls so astonished Mr. Piazzi Smyth, that he felt constrained to invent the theory of the direct interposition of Heaven to account for it, and assumed that

the builders avoided the demonstration of a belief from the purity and truth of their conviction about a God.

Another opinion is that certain races, as the Semitic people, had the religious faculty pre-eminently developed; that it was evidenced by the rise among them of the three great religions of Judaism, Christianity, and Mahometanism. Job, one of the Semitic family, is pointed out as an instance of a man, without the aid of any Scriptures (not having been then written) arriving at very clear and correct notions of the Almighty. It was said, moreover, that what was with the Jew an inward conviction, was a process of reasoning with the Greek. In Plato and Cicero we have exalted views of the Godhead, and suitable delineations of morals. On this principle of Selection, as one may call it, is founded the notion of the thorough inaptness of the Papuan family, including the Tasmanians, to arrive at so lofty a doctrine, as they were not so favoured with the inner life, or with the concentrating power of abstract thought.

Many readily accepted this solution of the difficulty. The Hill-tribes of India, like the Negrilos, Papouas, Australians, and Tasmanians, had no faith, and were, therefore, placed among the *Incapables.* Others went further, and grounded thereon an argument that these were not perfect man, but occupied an intermediate stage between the ape and true humanity.

Monkeys have been supposed devoid of the power of reasonable speech: if, then, one of that chattering order were found possessed of this faculty, it would at once destroy the idea of this distinction, and would establish the alliance of these animals with ourselves. At the same time, until the speaking climber be caught, we are at liberty to cherish the original belief of our removal from the monkey kindred. In the same manner, some writers were unshaken in their wild conjecture of the ape proclivities of the Tasmanian, so long as the latter dwelt in his darkness about an unseen God. When, however, it could be satisfactorily shown that one, at least, of these degraded creatures could realize the being of the Invisible One, and, better still, live under the feeling of His presence, the philosophers were bound to yield to the force of this convincing fact. The argument that the Hill-men of India, though surrounded by polished people, never received their polytheistic fables, may prove too much, as it may be equally assumed that the dark

race were too intelligent to accept such monstrous dogmas for truths.

To say of the Tasmanians that they were so senseless as to be ignorant of a God till taught, is but to place them upon a level with Englishmen, who had equally to be instructed. It is not to be expected that our islanders of the south could ever, under the ablest teaching of the missionary, arise to so high a conception of Deity as could Plato of old. But in English towns there are thousands whose ability to realize abstract ideas would not exceed that of the Australian.

The conception of Godhead is said by others to be the product of civilization, and, therefore, not to be entertained by the wild Tasmanians. But Job, in the wilderness with his squatting friends, knew better than the Egyptians under the magnificent Pharaohs. That the idea was a progressive one has been urged from a comparison of the Pentateuch with the noble aspirations of Isaiah—the writings of the Fathers with the Divinity of later days. We are privileged to live in a day of intellectual activity and moral perception. The Rights of Man are conscientiously studied, and courageously upheld. The Rights of Woman, never recognised before, are now thoughtfully examined, and seriously supported. In this silent, though perceptible, influence of progression may doubtless be traced some of our modern, and more worthy, appreciation of the God and Father of us all. We have still to remember that "the world by wisdom knew not God." A higher civilization may develop an intellectual grasp of Deity, but something more is needed to feel after Him and know Him, who is not far from every one of us.

While other nations painfully crept onward, as Professor Max Müller shows with the primitive Gangetic race, from the worship of the blind forces of nature to the recognition of a personal and benevolent God, or advanced from symbolic forms to inward reception, the Tasmanians remained motionless. They neither bowed to a brazen cow with many teats, to typify the exuberance of a liberal nature, nor constructed obelisks, to signify the force of gravitation, or conjugal union, as the beginner of all things. But while the Tasmanians were thus waiting in the times of their ignorance, we are not to suppose their minds a *tabula rasa*, nor regard them as an empty vessel to be filled with any liquid at will. The Egyptian wheat-grains, taken from the mummy-case, in

which they had lain for four thousand years, retained their vital principle, and with awakened power gave bread to man. The treeless plains of Australia will often, after ploughing, throw up a crop of flowering wattles, the sleeping embryo being disturbed by the moving soil. So with the Tasmanians: whatever rude reasonings about a First Cause they might have had, they knew not God, but waited only for the development of some innate, existing principle to know Him. The teaching of the White man broke up the ground; when the light of Heaven entered into the heart of the Aborigines, and they could rejoice in the beams thereof.

Dr. Carpenter has, somehow, discovered that "human beings existed long before the religious sentiment could be developed." There have always been nations with very little of it apparent. Mr. Bates says that the Manduruens of South America have "no idea of a Supreme Being." Sir Samuel Baker declares that the Nile "flows through a land of barbarians without a belief in God." There is not the trace of it among the Papuans of New Guinea, or the Negritos of the Philippine Isles. Mr. B. H. Hodgson found no word in the Tamil language of India for God or soul. Dr. Mouat calls the Andamaners "mere undeveloped children," and records, "They have no conception of a Supreme Being." Mr. Mouhot refers to the wild Baunavs of the forests of Annam, as having "no idea of a Supreme Being, Sovereign, and Creator of all things." When Mr. Bailey asked a Veddah about the Deity, he cried out: "Is he on a rock, or white ant-hill, or a tree? I never saw a God."

So of the Australians, another Godless race. The Rev. Mr. Schmidt, who long sought to convert some of them, admitted that "they have no idea of a Divine Being." He was struck, like others, with the difficulty of training a people without a religion, and remarks: "The impressions we thought we made upon them proved quite transient." He thought there was something wanting to account for this defect of abstract sense; "or," said he, "it is slumbering so deeply, that nothing but divine power can awaken it." The criticism of Major Warburton on the Indians applies to them: "In the languages of the ruder tribes there are no words to express anything that is not material." Mr. Eyre said long ago of the Australians: "A Deity, or great First Cause, can hardly be said to be acknowledged,

and certainly is not worshipped." The reader is referred to "The Last of the Tasmanians" for information upon Australian missions.

The Tasmanians were as destitute of the idea of Divinity as of the nature of the soul. As no word existed in their dialects for the purpose, that of *Godna* was invented to convey the doctrine. One who knew them well said they had "no notion of God or a hereafter." Mr. R. H. Davis declared: "I never could make out that they believed in a good Deity; for although they spoke of one, it struck me that it was what they had been told: they may, however, believe in one who has power by day." But this impression was gathered many years after they had been brought into association with the Whites. As to the future state, he tells his readers: "From every inquiry, both from themselves and from Whites most conversant with them, I have never been able to ascertain that such a belief exists." They were as indifferent and as ignorant as their fellow-Papuans of Arru, of whom Mr. Bik wrote, that, when he sought for information of their idea of immortality, they replied, "No Arupura has ever returned to us after death; therefore we know nothing." When told by the missionaries that God was everywhere, and in everything that is for our good, one of them replied, "Then this God is certainly in your arrack, for I never feel happier than when I have drunk plenty of it."

Sir John Lubbock has somewhere written: "Religion appeals so strongly to the hopes and fears of men, that I can hardly think any nation would ever abandon it altogether. When, therefore, we find a race which is now ignorant of religion, I cannot but assume that it has always been so." The decline of the Israelites into idolatry, though they afterwards returned to the true faith, may seem opposed to this theory; and the example of the Hau Haus of New Zealand, who have renounced Christianity for a fetichism, may also be thought opposed. Nations, like individuals, are subject to such vicissitudes. It is not less strange than true, that a man, who once knew the happy consciousness of living with God, has afterwards been seen living and dying utterly godless and vile.

But Jorgen Jorgenson said of the Tasmanians, "Nothing has been elicited from them to give reason to believe that they possess any sort of creed, or trouble themselves about anything

in the form of religion. They certainly have no religious rites." Dr. Nixon, first Bishop of Tasmania, though only arriving in that country in 1842, made particular inquiry upon the subject, as he always regarded the Aborigines as forming a part of his charge, and came to this conclusion: "No trace can be found of the existence of any religious usage, or even sentiment, amongst them, unless, indeed, we may call by that name the dread of a malignant and destructive spirit, which seems to have been their predominant, if not their only, feeling on the subject."

The Manichean doctrine, however, hardly got the length of the Southern Ocean to Van Diemen's Land. The "Debble-debble" was with them, as with the Australians, an object of dread; though many suppose, with some reason, that a knowledge of him was derived from the Whites. A friend of mine played upon the imagination of some troublesome Natives, that he was very anxious to get rid of, by making a peculiar sound, and then exclaiming in well-affected alarm, "Debble-debble!" which rapidly relieved him of their presence. Dr. Hooker records that the Lepehas of the Himalayas, while believing in both good and bad spirits, pay no regard to the former, observing, "Why should we? The good spirits do us no harm; the evil spirits, who dwell in every rock, grove, and mountain, are constantly at mischief, and to them we must pray, for they hurt us." It is certain that the wild men of the island were afraid to move about at night, and had a belief of their enmity. Captain Bateman informed me that when he was removing a party of them to Flinders Island, they were much alarmed at the impetuous motion of the ship, and came to him, saying, "Debble-debble—him take him ship;" and entreated of him to drop the anchor, and stay the monster from carrying the vessel and its living freight away, they knew not whither.

In the Van Diemen's Land narrative of Lieut. Jeffreys there is a sentimental and a highly imaginative story about the Natives, worthy of the most devout disciple of Rousseau; which, while showing the author's benevolent disposition, declares rather too much for the gentleness, intelligence, and piety of aboriginal *gins* stolen by rough sealers of the straits.

"It frequently happens," says the writer, "that the sealers, in the pursuit of their occupation, are compelled to leave their

women for several days together. On these occasions these affectionate creatures have a kind of song which they chant to their imaginary deity; of whom, however, they have but a very indistinct notion, and who, they say, presides over the day, an evil spirit, or demon, making his appearance in the night. This deity they believe to be the giver of everything that is good, nor do they appear to acknowledge any more than one god. The hymn, or song, which they address to him during the absence of their husbands or protectors, is intended to secure his divine care over them, and especially to bring them back with speed and safety. The song is accompanied with considerable gracefulness of action, and is poured forth in strains by no means inharmonious. On the contrary, the voice of the singer, and, in many parts, the sweetness of the notes, which are delivered in pretty just cadence and excellent time, afford a species of harmony to which the most refined ear might listen with pleasure."

The English sailor here out-Pérons anything said by the French voyagers, when extolling the grace of Ourâ-Ourâ, and the sweetness of the harmony of the syrens' song. When travellers in our own day have such overflowing fancy, we wonder not that our Saxon forefathers believed that there were men in Babylon with eyes in their breasts, and that the sun never shone on the Red Sea.

All persons who have lived among barbarians are aware of their readiness to acquiesce in a statement, from inability to comprehend the remark, from idleness arresting thought, or from a disposition to be agreeable, especially if there be any chance of "white money." Hence, as the Rev. John West said of the Tasmanians, "Persons of sanguine minds are apt to attribute to them religious ideas, which they never possessed in their original state." I know a gentleman who, by dint of questioning, astonished himself and his friends by ascertaining that the Blacks were well acquainted with the doctrines of the Trinity, justification, sanctification, and the millennium! The good-natured fellow whom he had interrogated had nodded his head with a very grave face to every inquiry of the worthy Christian, and ended with a solemn affirmation of "Me b'lieve every ting." The ardent millenarian, though delighted with the native recognition of his favourite dogma, was rather scandalized when the believer asked him for some grog.

There is not a little love of fun in the despised Aborigine, which occasionally borders on the profane. Mr. Gideon Lang has a story in his pamphlet about a friend of his trying to make an intelligent Blackfellow understand the immateriality and immortality of the soul. "One day," he says, "the teacher watched, and found that he went to have a hearty fit of laughter at the absurdity of the idea of a man living, and going about, without arms, legs, or mouth to eat."

Descartes once remarked, "Give me the idea which exists of God among a nation, and I will give you their strength." To ascertain this has ever been a difficulty. Major Warburton says: "Those Indians who attempted to explain it to Europeans had themselves no distinct or fixed opinions. Each man put forth peculiar notions, and was constantly changing them, without attempting to reconcile his self-contradictions." The same may be said of our dark-skinned islanders. When one was asked why the spear was put with a Black's corpse in a tree not far from Hobart Town, he replied, "To fight with when he sleep." Here may be a faint glimmering of light concerning the future, even as we see weapons buried with the cave race of Europe. This led Sir C. Lyell to think that a belief in a future state was "long anterior to history and tradition." And poets sing—

> "The paint that warriors love to use
> Place here within his hand,
> That he may shine with ruddy hues
> Amidst the Spirit-land."

But whenever the Aborigine was interrogated about the practice of any such burial rite, his only response has been: "Blackfellow, him always do the like o' that." This is the only satisfaction that we can obtain as to his knowledge of a God, or of a hereafter. Could any clearness of vision be expected from a people who belong to the Draviro-Australian race, existing long before the Aryans came down to the Ganges, and when these very Aryan fathers of the European families were, according to Professor Max Müller, long without the knowledge of a God?

The Rev. Mr. Dove, who lived on Flinders Island with the Tasmanians as their chaplain, who had received the usual educa-

tion of a trained Presbyterian minister, who was really interested in the people, and intellectually qualified to form an opinion upon the subject, distinctly records this conviction of his black charge: "No pretensions to any kind of witchcraft seem to have ever sprung up among them."

If this were true, then they were the first nation of whom such could be said. All races, including the reverend gentleman's own, north of the Tweed, have indulged in practices commonly regarded as pertaining to witchcraft. If it be proved that the Tasmanians were no exception to the rule, the chaplain was in error. It would not be the first time that the minister and his people went in parallel lines unconsciously and innocently, neither understanding the ways of the other. Mr. Dove's idea of witchcraft may have been gathered from that horribl exposition of human folly and cruelty—the trial of witches in Scotland. None of the *fair* Tasmanians had confessed to him the visits and courtings of a certain personage, in the guise of a goat or black tom-cat; nor had any of them enjoyed the delights of witches' Sabbaths, and so exposed themselves to fire and faggots. They were not likely to parade their superstitions before their solemn religious instructor.

Though the Tasmanians were free from the despotism of rulers, they were swayed by the counsels, governed by the arts, or terrified by the fears, of certain *wise* men or doctors. These could not only mitigate suffering, but inflict it. In their hands the sacred bone or stone wrought marvels. They were the exorcists of the tribes. They twirled round the magic *mooyumkarr*, an oval piece of wood with a string. Mesmerisers by profession, their pressure on the part affected, and the utterance of some verbal charms, had a medicinal power. A *pass* at their will was effectual. With a word, and a sort of *presto fly*, the disease would be forcibly expelled from the sick. A mesmeric friction would bring out a bone or stone, the cause of the sufferer's complaint. When the Tasmanians were at war with the colonists, they had a great dread of soldiers. These formidable beings were seen to put their hand behind, after the approved method of native doctors, bring thence some fire, put it in their guns, and afterwards eject it at the unfortunate Aborigines. To make the process thoroughly complete, though sadly reversed in kind, a round, heavy stone-like thing was often

found *in* the body of the poor creature whose life had thus been charmed away.

The doctors not only threw round the magic *mooyumkarr* which must on no account be seen by females, but they used the formidable rattle of dead men's bones. This instrument has been found all over the world in the hands of the charmer. A philosopher has described it as a philosophical toy, illustrating to the ears of barbarians the symbolic truth of that chaotic confusion which reigned before order in creation. It is not quite certain that the Tasmanian charmer comprehended the secret of this ritualism.

As the islanders were so little in contact with the Whites, or the latter were so little observant of the customs of their neighbours, it is necessary to cross Bass's Strait to acquire more information upon this subject. There the doctor is known by various names. To the east he is the *Karakeel.* Forty years ago, Mr. Struilby described the Crajee or magician of the Macquarie River tribe giving a speech at a young-man-making festival about the rights of the nation, and the rights of the husband. The Idlaidlangko, or Kungkangko, of the Murray, had great mastery over the Kambattan or spirits. The Melape of Encounter Bay carried horns upon his head on great days, in imitation of the Melape, or dark spirit. The Parraitye-oru of the coast was known as the sea-weed man, because of his power to cure diseases by chewing a piece of the weed, and concealing it upon the person: as the sea-weed dried, so the disease evaporated. Elsewhere the man is called Wiwirri-malde, the curer of wiwiri, or sickness. He operated upon the evil one—Pipe. The doctor of the New South Wales interior gave some trouble to Major Mitchell. On the south coast, toward Victoria, the magic performer was known as the Kattari-oru. He conjured with the wand called kaity-engk, consisting of two sticks bound together, and having a sacred stone between them at one end. The Inguas of Western Australia assumed distinguished airs. Those of King George's Sound are the Mulgarradocks. Armed with the mintapa, or power of witchcraft, the magician was much dreaded at Port Lincoln, especially as he could even kill by the mysterious kartipalka. Experts could transform themselves into birds or lizards, or charm water to blood in the hands of the drinker.

All magicians of Australia could suck out obstructive elements of mischief. In Adelaide the worm paitya was thus extracted; elsewhere it was the pajé. Blowing upon the place affected relieved also. Occasionally, when the bone, stone, or worm was withdrawn from a bewitched one, the doctor could cause it to enter the body of another. He could throw the Murrokun bone into a sceptical Thomas of the tribe. Sorcerers, like prophets, had a reputation in proportion to their distance from home. Those of the interior were dreaded much by the Murray Blacks. In the hands of some the Plongge or charm-stick, if applied to a sleeper, would cause him to die of the next wound received.

The doctors had the reputation of casting the *evil eye*. The *red hand*, stamped to this day by the Arabs as a preservation against this fatal glance, is recognised not only in India and America, but in Australia and Tasmania. Fascinations were performed by *fascia*, for which rosemary was used in Europe. The Tasmanians believed, with Ovid and Pliny, in the power of their wise man to destroy numbers by a judicious employment of the evil eye. They did not, however, find it necessary, like the old Irish, to place on their dwellings the dreaded figure of the Shelah-na-gig, to turn aside the look; nor were they artistic enough, like some Africans, to carry about a picture of a white devil to preserve them. As with the Karens of Asia, clay taken from the path trodden by another could be turned to his hurt. Human blood, with incantations, poisoned water for a foe. The Inguas of Western Australia could, however, like the Umossees of Madagascar, make owleys of roots, &c., to charm with, or put a powder in the torn flesh of a beast to take away the life of a man. Exorcism by spittle was exercised by the native magicians. Bishop Hay refers to the practice of the ancient Church (so in some modern Churches), to anoint the baptized with spittle, while the priest exclaimed, "Be thou put to death, O Devil." The Jesuits in India, finding mothers had a prejudice and horror against such a lustration, omitted the spittle in the admission of infants into the Church. The South Sea Island chiefs have a slave to carry a spittoon wherever they go, that no one may be possessed of so important a charm against them.

Mr. Stuart, the Australian explorer, has the following story of a corajee. The Natives on the Taylor, near the centre of the continent, had set fire to the grass to drive away the Whites.

"In the midst of the flames," said the traveller, "the Natives appeared to be moving about, performing all sorts of antics; behind them came an old man with his women. At every high flame he seemed to be performing some mysterious spell, still yelling in the former hurried tone, turning and twisting his body and legs and arms into all sorts of shapes."

Although African doctors perform the duty of rain-makers, few instances are on record where the Australians and Tasmanians have sought to exert this conjuring power. A letter was lately inserted in the Dubbo press of New South Wales, that shows the existence of this craft in New Holland. It says:—"One of the oldest Blackfellows in the camp is generally the doctor and peacemaker. The rest look up to him, not as a thing, but as a man capable of more understanding and knowledge than themselves." The process of his rain-making is afterwards described. "A young virgin is then selected, and one of the veins in her wrist opened, from which is extracted about a gill of blood. The sable doctor has on hand a quantity of water-washed crystallized quartz pebbles. One of these is steeped in the virgin's blood for some time; then the lot is tied up in the pieces of bark, and consigned to one of those deep water-holes in which the Blacks believe exists Nutchie, better known as the devil-devil." After this ceremony, rain may certainly be expected.

The Tasmanians were known to practise witchcraft after the old European fashion. They procured something belonging to the unfortunate object of their wrath, wrapped it in fat, placed it before the fire, and expected that as the fat dissolved before the heat, so would the health of the party decline. A few hairs were most commonly used. The South Australian missionary Mr. Schürmann, thus writes of this superstition:—"Ignorant of the supreme Disposer of life and death, too little reflective to ascribe their bereavements to a blind fatality, yet susceptible of intense feeling, and superstitious withal, it is, perhaps, not so very wonderful that they should seek the cause of their sorrows within the compass of human agency." It is this feeling which prompts them to seek revenge upon the supposed author of their friend's decease, after a sort of inquest held upon the body, asking the question, "Who killed you?" By the exercise of certain occult powers, their wise men discover the direction of

the foe's flight. Other tribes ingeniously place an insect upon a piece of bark, utter a wonderful charm, let go the creature, and notice which way the spirit leads it. Once upon the track, they follow on until they meet with an unhappy wanderer, who is instantly murdered. The Tasmanians imagined that some spiritual agency slipped down a gum-tree by their camp-fire at night, crept behind a sleeper, stole his kidney fat, and so occasioned his removal to the land of shades.

Charms have been employed by the Tasmanians as with all other nations. Like the modern Italians, they were careful of hair getting in the possession of an enemy, as it furnished the means of bewitching them. Some kidney fat of a man or woman put in a bag, which was suspended from the neck, exerted a counter influence. Sacred stones, similarly suspended, exerted a like power. A girdle of human hair, with the netted string from the root of the bulrush, was an effectual preservation. The Tasmanians, as a gentle race, were less famed for aggressive charming than for the use of preventive means against a charm. Pain and suffering were diverted in many cases, and alleviated in others, by the use of a human bone. My previous work gave several illustrations of this. Manalagana carried the jawbone of his friend against his breast. Such a treasured memorial of past affection could often soothe the sufferer if laid upon the part then in danger. A story is told of a child, belonging to the Oyster Bay tribe of Eastern Tasmania, being buried in a blanket provided by a kind-hearted settler. The tomb was observed next day to have been disturbed, and, upon investigation, the head was missing. In two days' time the skull of the little one was seen upon the broad chest of a Native. It was not only by the application of the bone to the seat of pain, but scrapings from it were especially valuable; even the water in which the sacred relic had been steeped had charming properties. A powerful charm was required by the islanders to keep bad spirits from stealing the body of a person dying in the night. None of their charms had sufficient power to turn maidens into rocks, as with the Maories and the old race on the Rhine. There is no record of their using the *paityowatti* of the Australians—a pointed bone with a piece of sacred stone, which, applied in the neighbourhood of an eye, would occasion loss of sight to the party. Songs, however, were esteemed serviceable to charm away

disease, if not to secure the infliction of evil. Davis, of Moreton Bay, had a charmer to visit him in sickness, bringing with her, as part of her stock-in-trade, a dried human skin, having the ears, and also the finger-nails.

The Tasmanians feared spirits, if they could not fear a God. However mischievous their beliefs, we may yet exclaim with the Rev. E. Cassalis, "I see in them a dyke resisting the invasion of absolute materialism." And yet, as Dr. Waitz has observed elsewhere of this superstitious element, "it influenced their whole conception of nature." Dr. Milligan says of his Flinders Island charge: "The Aborigines were extremely superstitious, believing most implicitly in the return of the spirits of their departed friends and relations to bless or injure them." They did not, however, as the Blacks of India, conjure the soul of the dead man into anything, and carry *that* home after the burial. Mr. A. H. Davis relates that, "during the whole of the first night after the death of one of their tribe, they will sit round the body, using rapidly a low, continuous recitative, to prevent the evil spirit from taking it away." Such evil spirit was the ghost of an enemy. Fires at night kept off these mischievous beings, which were like the vampires of Europe. "These," says the Rev. T. L. Harris, "taint the atmosphere which surrounds the corporeal body." When the poor Tasmanians were being conveyed to their island prison, they were much terrified at the ship's movement, and rattled their sacred bones to prevent the devil from running away with it. That particular personage was called namma by Mr. Davis. According to Dr. Milligan, in the eastern dialect he was comtena, in the western patanela, in the northern talba, and in the southern rargeropper. The Rev. T. Dove called him namneberick.

With the Australians, the Evil One, or chief of soul spirits going about to injure Blacks at night, was nokunno in Adelaide; melape near the coast; bullgenkarnee, *the ugly one*, in Port Phillip; ingua in Western Australia; nokunna in the interior; goorang in Western Victoria; turramullum on the Barwan; maui at Brisbane River; marralye at Port Lincoln; maiye in Queensland; warroogoora on the Murchison; kunyo, &c., elsewhere.

There is, however, great obscurity about the nomenclature of the spirit world, even in these modern days of enlightenment.

It must not, then, astonish us to find a confusion in the Tasmanian mind about ghosts, spirits, demons, fairies, and devils. Dr. Milligan did his best to classify these, though, we fear, with indifferent result. From his vocabulary the following is taken, giving the names according to the tribe, east, west, south:—

Fairy: east, nanginya; south, nungheenah, or noilowanah.

Demon: east, mienginya; south, ria warrawah noilé; north-west, pawtening-eelylé.

Ghost: east, wurrawana, or ria warawapah; north-west, tee-anangawinné.

Devil: east, winnya wainettea, or miengiunya; south, winneluaghabaru. The word to summon a spirit is preolenna.

The Australians, in like manner, give a very uncertain idea of the spiritual. A good spirit, called improperly *God* by some writers, is dhurumbulum at Twofold Bay; mumbal mirir, burrai, burrani in Queensland; narroon in Port Phillip; baiame on the Namoi; moonmoondick, or bullarto marming'ata, in East Victoria; pundyl near Melbourne, &c. &c.

In South Australia, the tarrotarro lizard spirit divided the sexes, and parnda, the kangaroo spirit, introduced cicatrices. The ghosts are mummuya, marai, lambarmoor, reinguilpe, mara, kunyo, purkabidni, &c., according to locality. Souls are generally supposed to come from the west, either floating over the sea, or sporting among bush flowers and grass trees. The Indians, Hindoos, Chinese, Persians, Thibetians, Greeks, Germans, and Celts, all placed the spirit-world in the west, the land of babydom. The Port Lincoln Blacks spoke of a soul-land in the island of Mungaltanna, in Spencer's Gulf. The Adelaide natives supposed the souls of their ancestors to have proceeded from a large cave. Neulamkurrk was a cave-spirit of Victoria, devouring children. The spirits of the Mallée country to the west were called nurrumbung-uttias. But most were like the Paisachs or Virikas of the Indian hills—souls of the dead. Sir Walter Elliot speaks of the Pey, or bad spirit-worshippers, of Southern India; and Buchanan regards that religion as existing there before the invasion by the Aryans. The Port Phillip Hades was pindye. The Adelaide word for seed is yitpi, and for the human soul, yitpi tukutya.

My friend Mr. Clark, the catechist of the Tasmanians, wrote to me thus: "The greater portion, but not all of them, believed

that they were to live after the body died. Some of them showed me the stars where they were to go to. Others imagined they were to go to an island where their ancestors were, and be turned into white people. The more western portion of the Aborigines had no idea of a future existence. They thought they were like the kangaroo." His fellow-official, then Protector of the Natives, Dr. Milligan, enters more into particulars. "They were polytheists," he wrote; "that is, they believed in guardian angels or spirits, and in a plurality of powerful, but generally evil-disposed beings, inhabiting crevices and caverns of rocky mountains, and making temporary abode in hollow trees and solitary valleys: of these a few were supposed to be of great power, while the majority were much of the nature and attributes of the goblins and elves of our native land." Mr. Oldfield says the same of the Western Australians. "The number of supernatural beings," he observes, "feared if not loved, that they acknowledge is exceedingly great; for not only are the heavens peopled with such, but the whole face of the country swarms with them; every thicket, most watering-places, and all rocky places abound with evil spirits. In like manner, every natural phenomenon is believed to be the work of demons, none of which appear to be of a benign nature, one and all apparently striving to do all imaginable mischief to the poor Blackfellow." In that respect, their imagination, poetry, or supernaturalism, had a power equal to that of the ancient Greek.

The Tasmanian word for shade or shadow is that for spirit. Dr. Milligan heard one of the Aborigines ascribe his deliverance from some accident to the preserving care of his deceased father's spirit, his guardian angel. The Protector added: "The Aborigines were extremely superstitious, believing most implicitly in the return of the spirits of their departed friends and relations to bless or injure them, as the case might be." Well may the Australians look forward to the time when no bad ghosts will molest them!

The Tasmanians conversed with the spirits of the dead. Mr. Anderson's account of the Negrilos of Malaya would apply somewhat to them. "They practise a sort of Sibylism," he says: "an arbour of thorns is framed; into this a man and his wife are put, the neighbours being outside. A strange noise is then supposed to be heard, which is believed to be a sign that the invoked

spirit had possessed the enclosed pair. They then come forth, and whatever they utter is considered the will of the spirit alluded to."

They never repeated the name of the dead. In this respect, as has been shown elsewhere, their custom is the same with many peoples in the eastern and western hemispheres. A recognition of the presence of the spirit near them may make them thus reticent. The deceased would be angry at his name being taken in vain, and might pass into the body of the offender through his fundament, and consume his liver. A person having tricked an Australian lubra into pronouncing such, though accidentally, she became much excited, and *spat three times*, as naturally as many English and Irish peasants would do at the present day, to avert some malign influence. I knew a native mother, who angrily threw a stick at a man that innocently asked about her son, then recently dead. The Shetland Island widows like not the mention of their deceased lord.

Secret names were given at reception into the rank of manhood. These were whispered to the initiated at the conclusion of the ceremonies. A similar practice prevails in some tribes of India. In this way many nations have abstained from using the secret name of their presiding deity. The Hindoo wife, however, never uses the name of her husband. The Australian must not use that of his sponsor or operator at young-man-making. Some South Americans, believing that death comes from the calling of a person by name, will often try to cheat the devil by changing names with the sick person, who may thus escape the clutches of his spiritual foe.

Certain animals had mystic connexions with them. For instance, in the Lake Macquarie tribe, the women venerated a certain small bird, and the men a particular kind of bat.

The "*Jump up Whitefellow*" doctrine, though received by the Tasmanians, was by no means confined to their nation. At the first appearance of Europeans there would necessarily be a grave discussion as to their origin; and opinions, doubtless, differed with them as in the controversies of our enlightened selves. Whether by council or synod, it was resolved, that if they had not dropped from the sky, they must have come from the grave; and, further, that, as there could be no other mortals than those living in their own land, these strangers could be none other

than the reappeared of their own dead kindred. Even then some difficulty had to be overcome, for the deceased were buried black, and these now came with white faces. Still, as with ourselves, they contented themselves with the acceptance of the major proposition. Who could possibly tell the fearful ordeals through which the strangers may have passed in the region of souls, and which ought to be regarded as sufficient to pale them ever after?

The earliest printed notice I find of this opinion among the southern tribes is contained in the *Sydney Gazette* of January 20, 1805. It runs thus: "One of them, advanced nearer to civilization than the generality of his brethren, interrogated as to his notions as to what was to happen after death, replied with some embarrassment, that he did not know positively, but perhaps he might become a white man." The poor fellow, who was hanged some years ago in Melbourne, had the hopeful belief, expressed at the last moment, that he would jump up Whitefellow, and have lots of sixpences. In one of the early New Holland voyages is the account of a vessel putting in at Port Stephens, in 1795, and there discovering four runaways from the Botany Bay penal station. One of them had lived five years with the Blacks, being kindly treated, because he was reputed to be the returned father of one of the tribe.

Orson Pratt, the Mormon philosopher, is not alone in his view, that "the spirits of men and women have pre-existed for thousands of years." Origen, and other Christian Fathers, taught the same. Ancient as well as modern philosophers have alike indulged the idea expressed by the Mormon—"Our spirits are formed by generation as well as our bodies." German, English, and American mystics have favoured the Blackfellow's profound superstition of "Jump up Whitefellow." If extremes meet, it is at least interesting to find the barbarous Tasmanians in such good company. They are certainly as safe as others in speculations of the kind, as there is no sure source of information open to us for or against the pre-existence of souls.

The Druid bards tell of the great Taliesin being born a babe again, though formerly known a hero of song. About 150 years ago, the queen of a part of Madagascar recognised a young runaway French sailor as her son, whom she had lost years before in childhood. There was the identical mole under the

breast. In spite, therefore, of change of colour, the Parisian became a prince in the island, and formed an extensive anti-celibate establishment. Once upon a time, upon the Macquarie River of New South Wales, there lived a Native having a bent arm. Not long after his decease there appeared a settler in those parts having, also, a bent arm. He was immediately recognised as the risen one of the race. An old woman at once saluted him: "O my Balludery, you jump up Whitefellow." After that, the tribe would do anything for him.

Sir George Grey has a similar story about himself, he being thought to be the returned son, formerly speared to death in an affray at Swan river. "Yes, yes, it is he," cried a venerable mother: "gwa, gwa, bundo bal." She leaned her head on his breast, and burst into tears. The father and brother saluted him as the beloved recovered one of the family. A friend of my own was recognised by a Tasmanian tribe as one of their men, and treated accordingly.

Several men's lives have been preserved in consequence of this amiable superstition. Explorers in Australia have thus met with runaway convicts who lived with the Aborigines, and saved from the spear and waddy usually ready for the white stranger. Buckley, above thirty years with a Port Phillip tribe, is a well-known instance. A woman recognised him as her son, and he was adopted into a family that ever regarded him with most affectionate consideration. Davis, who was fourteen years with a Queensland tribe, gave an interesting statement about this idea: "The Natives," said he, "supposed all their own men who had died, or been killed in battle, to become white men, because, before eating them (for they are cannibals), they draw the skin off, and roast the flesh before cutting it up. When flayed in this way, the flesh of a black man is perfectly white. They believe he becomes a white ghost in another country beyond the sea. Accordingly, when they first heard of Whites, they supposed them to be the ghosts of their own dead come back." In that way he was himself honoured among them.

Philology assures us of the strength of this belief. Generally the word for *ghost* is applied to *white man*. This is wunda on the Barwan and Namoi rivers; makoron and mudhere in South Queensland; nūru in the Turrubul language; tangin at Brisbane River; and magnui further north. According to the Rev.

H. A. C. Meyer, the German missionary at Encounter Bay of South Australia, the word for a European is gringkari, *a dead man.* Dr. Milligan has collected from the Tasmanians on Flinders Island two expressions for the "Jump up Whitefellow" belief. The eastern tribe called it winya waumetya; the southern Tasmanians had the phrase, ria warappé noilé.

Among their superstitious rites dancing was conspicuous. It is to be regretted, again, that the retiring habits of the Tasmanians, and the early conflicts of races, prevented observation of their customs. Their ordinary dances did not escape notice; but those of deeper signification were kept out of sight from white men, as well as from black women. There, surrounded by romantic scenery, and partially shrouded from the moon's beams, these sons of the wilds joined in celebrating terpsichorean rites that may still, perhaps, be witnessed in the groves of the sub-Himalayas, and the secret dells or acclivities of the Indian Archipelago. These formed surely a strong link that bound the savages of the southern isle with the ancient civilization of their primæval home. For, after all, superstition may be as Nilsson describes it, "the ruin of an ancient temple long overthrown."

There was one dance known, which is still performed on the continent of Australia. The Tasmanian men held a dance, or rather a moving ceremony at full moon, in which they wandered about the trees inside of a magic circle, looking intently for something or somebody lost. The firestick was held down to the ground, or upward to the foliage, in the search. It was thus that the ancient Egyptians hunted after Osiris, in memory of the time when he concealed himself in the moon for fear of Typhon the Destroyer. The howling at some of their corrobories has been compared to the cries of the dancing Corybantes, or to the night revelry of the Devil-worshippers of the Assyrian mountains. Some dances were merely connected with charms for curing the sick. The women beat their opossum rugs, as females once played their noisy tabrets to drown the cries of the infant sacrifices to Moloch.

The hissing at some of their dances has been thought a remnant of the Orphic faith. An old man who had been much in the forests of Van Diemen's Land in the primitive times gave me an account of a dance which much resembled that

mentioned by the Rev. Mr. Ridley of New South Wales. "A Blackfellow," he writes, "once explained to me the object of a dance, or pantomime, kept up all night on the Barwan, to drive away the ghosts of the dead which were supposed to infest the neighbourhood." We have something allied to this Tasmanian custom in European and American drawing-rooms. Mr. Hull, J.P., of Melbourne, observed similar dances in Port Phillip. A remarkable theory was developed by a Native respecting an elaborate dance, called the Gaagape, in October 1848. It was this: "Long time ago young men sit down—plenty dark—took out 'possum rugs—no good—bybye come old man open little door—then big one sun shine—then Blackfellow glad, and sing it like Whitefellow, on big one Sunday, and call it Gaagape." This reference to dark chaos before the birth of the sun reminds one of the times when "the gay Satyrs tripped in jocund dance such dance as Bacchus loves."

Few things tend more to connect our savages of the South with more cultivated nations than such mystic dances. Their own, and those of the Euphrates and the Nile, may have had a common origin. It was of such mysterious rites that the British bard wrote when he said, "Eminent is the virtue of the free course when this dance is performed." As the solemn dances of the Britons, the Egyptians, the Greeks, &c. were held at the spring of the year, so were those of Tasmania and Australia. The Porrobung of Eastern Australia was truly a mystic dance in a mystic ring. Mr. Threlkeld tells us that the word *por* means both *to drop down* and *to be born*. In some dances the chief performer was believed to be inspired, and uttered strange tongues in his frenzy.

The great dances were held at full moon. The classical scholar is in no want of references to ancient authorities for this custom elsewhere. Diodorus names Apollo's dance with all his train once in nineteen years—clearly connected with the moon's cycle of change in that period. The Rev. Dr. Lang, a keen observer of the habits of Aborigines, has a good tale of a dancing fight with spirits, near the river Barwan.

"Suddenly," says he, "from under a sheet of bark, darted a man with his body whitened by pipe-clay, his head and face coloured with lines of red and yellow, and a tuft of feathers fixed by means of a stick two feet above the crown of his head.

He stood twenty minutes perfectly still, gazing upwards. A aboriginal who stood by told me he was looking for the ghost of dead men. At last he began to move very slowly, and soo rushed to and fro at full speed, flourishing a branch as if t drive away some foes invisible to us. When I thought hi pantomime must be almost over, ten more, similarly adorned suddenly appeared from behind the trees, and the whole party joined in a brisk conflict with their mysterious assailants."

No one can doubt the association of astronomy with their superstitions. No nation has yet been found whose theology, so called, was not connected in some way with the heavenly bodies. The Tasmanians were no exception. But our interpretation of the silence of the islanders must be found in the more distinct utterances of the Australians. In quoting authorities upon this subject, I think it necessary to guard the reader not to trust too implicitly the information afforded. Most savages, without any intention to deceive, are apt to affirm anything the inquirer wishes, or may be thought to gratify him.

The Milky Way, of course, attracted their attention. This "Birds' Way" of the Finns, "Mill Way" of Germans, "Spirit Way" of the Aryans, "Cow or Cloud Path" of Friesland, "Bridge" of the Persians, was the lake of the Yuras, the lizards or serpents of the sky among some Australians. The Murray was made by one of the snakes from this celestial pool. Some thought the Milky Way was the smoke from the fires of these pleasant animals. The Dippil natives called it the muin or muum, and those of South Australia the mamramko. Their souls, like our own forefathers believed of theirs, often passed along that bright passage. The brilliant magellanic clouds, formerly male and female birds called Native Companions, were recognised as the ngakallamurro; but the dark spots, or coal-sacks, as yurongpailtyerri, according to Dr. Moorhouse. The Cross did not occupy a space in their rude mythology. The Murray Blacks thought that Bungula and Agenor, the two Pointers to the Southern Cross, were once two turkey buzzards that came down to relieve the world from the tyranny of a dreaded ornithological monster. Another version is given by Mr. Stanbridge, procured from the Fiery Creek tribe of Victoria. Bunya, the opossum, residing in the star forming the head of the Cross, was chased into a tree by Tchingal, the Dark Cloud,

in the form of an emu. In the Pointers were two brothers Bermbermgl, who murdered another brother. Two stars remain to show the points of the spears through their unhappy victim.

Orion and his belt furnish many traditions. The Tasmanians cherished a respect for this constellation. They are called mirrarri at Port Lincoln, kurkukurkurra at Adelaide, kunnai in Queensland, and kulkurrbulla in Victoria. They are always considered as young men, or as the tinnunyaranna, hunters of kangaroos, on the plains of Womma, who are courted by the fair maidens of the Pleiades near. Antares, with his red-ochred face, has his two wives by his side. Arcturus taught the Port Phillip tribes to eat some favourite pupa; the philosophy being, that upon the setting of that star with the sun the season for these grubs has gone. Aldebaran was thought a rose-cockatoo; Rigel an eagle; Canopus a crow that brought down fire; and the Southern Crown a celestial boomerang. Capella was a kangaroo pursued by Castor and Pollux; the smoke of the roasting can be seen till autumn time. Sirius—the murraynowey of New South Wales, and warepil of Victoria—was a powerful chief in the heavens, but occupied no such distinguished place as in the theology of other peoples.

The Pleiades were recognised as moonmoondick near Melbourne, larnankurrk in Western Victoria, murrinmurrin near Moreton Bay, and mangkamangkarranna in South Australia. All native traditions agree that they were the favourite ladies of the hunters of Orion, and occupied their leisure in digging roots for the suppers of the gentlemen.

Mr. R. G. Haliburton, of Nova Scotia, has collected so much interesting material about the Pleiades, that a brief notice of his essay may not be out of place here.

Identifying this interesting constellation with spring and All Souls' Day, he distinctly states his belief that the ancient superstition of that November festival of the dead, still cherished by some Christian Churches, and reverenced among Babylonians, Persians, Egyptians, Greeks, &c., was brought to Europe and Asia *by a migration of races from the Southern Hemisphere.* He traces the All Halloween, All Saints, and All Souls through Asia, the South Sea Isles, Japan, and Australia. The Hindoo year began in November, in Cartigney, the month of the Pleiades; the Hesperides are traced to that constellation; the Hebrews,

Egyptians, and Chaldeans called it Athor—November. The three days' mourning for Osiris began at All Halloweve. The Australian traditions of spring and the Pleiades are cited. The Society Islands' two seasons are called often Pleiades below and Pleiades above the horizon. There, when the culmination at midnight took place in November, prayers were made for deceased relations. So it was with Asiatic people. The Persians, Greeks, Egyptians, and even Mexicans, observed Nov. 17th, the date of culmination of the Pleiades. The Deluge occurred on that day; the ark was on Ararat upon the 17th, and the dove returned with the branch on the 17th. The Tasmanians used to hold a great annual corrobory at the full moon in November, when tribes assembled in peace, and great rejoicing took place.

The sun was an object of superstitious feeling, though not of worship. The Tasmanians regarded it as a female, as did our Saxon ancestors. Fire with them, as with others, came from heaven, either by a bird, a bandicoot, or other spiritual agency. The firestick ever accompanied them on their march. It was made of a particular wood, as was the fire of the Vestal Virgins. It was supposed never to go out, being perpetuated by other firesticks, or being produced by the friction of sticks, as was the sacred fire of temples and of ancient Christian churches. The presence of that fire preserved them from bad spirits, as it did our own forefathers. The firestick of the Vedas was a wish-rod, and was in the form of a man.

In Australia the name *Baal* repeatedly occurs, and has been considered by some writers related to solar worship. Some of the traditions have quite a Maori type, and remind one of the story of a New Zealand god waylaying, catching, and severely beating the sun to make it go less quickly. The Australian spirit Koen is the sun. It is she that kills her husband Taorong, the moon, every month. Such is the story of her in Western Australia, Eastern Australia, and Queensland. The name has been thought connected with the Egyptian Kron or Khun. According to the Lake Macquarie people, Koen carries a firestick about with her. One tale is that Koen is a male spirit, seizing Blacks at night, carrying them a great distance, but restoring them to the camp fireside. His wife Tippakalleun cruelly spears children, and takes them below in her bag.

Koyorowen skewers and roasts women, and his wife Kurriwilban impales men on horns growing out of her shoulders. In another part they said the sun was an emu's egg, thrown by a spirit into the darkness.

The red colour used at certain mystic dances has had reference to sun worship, as Max Müller and others think. The red hand, marked on trees and rocks alike in Tasmania and Australia, is thus spoken of by the Rev. W. B. Clarke of Sydney: "I have always regarded the red-hand as a charge against dibbel-dibbel." The sun in all ages has been regarded as the conquering foe of darkness, or the Evil One. A singular dance was once seen by myself in South Australia. A man came into the circle limping as if lame, and groaning as if in pain. He was supported by two companions, who pretended great sympathy with his sufferings. All at once he sprang into the air with a loud laugh, in which all the tribe heartily joined. Vulcan, otherwise the sun, was the halting god. Baal Thalatth means *he that halteth*. The priests of Baal, says Kitto, limped at the altar. The Druids in some rites did the same.

The sun was variously known by the Blacks—being in Van Diemen's Land petreanna, loina, nabageena, pugganoobra, &c.; in Port Phillip, noweenth or ngerwein; at Grafton, tharoo; on the Darling Downs, boroka; in Eastern Queensland, mungarra; at Wide Bay, ngaunanth; at the Macquarie River, jeeralang.

Mounds, to be found in Tasmania and all over Australia, were once supposed to be only native ovens, as the loose soil was suitable for cooking purposes. But as a small hole was sufficient for cooking, and some of these mounds are eighty feet in circumference, consisting of earth, stones, ashes, bones, and charcoal, they have been associated with sacrifice of bodies to the sun. A Victorian surveyor writes: "I believe these mounds have been altars used by the Aborigines at a remote period in their worship of the sun." The name given to some of them—*noweenth weenth*, sun fires—is very significant.

A Canadian journal has a letter from Mr. James Browne, giving an Australian tradition of the celestial origin of fire. The sole possessor of a firebrand in the genesis of time was a bandicoot, which brought it from the heavens. The animal selfishly kept it for the warming of his own thick skin, and refused to share it with others. A pigeon sought to steal it

from him, when the disagreeable fellow threw it away toward the river. The watchful bird was in time to save it from being extinguished in the water, by knocking it over the stream with its wing. The firestick fell amongst the dried grass, the flames spread through the Bush, and the Blackfellow thus secured the fire for his evening camp.

The moon shared in the affections of the rude tribes. The eastern Tasmanians called it wiggetena; the southern, weetah; the north-western, weenah leah. The dances held under her mild light were doubtless associated with respect for her. The Turkish crescent, or boat, was the form adored by some nations; but the full moon, or globe, or egg, was the other, and the only one known to our southern races. They looked upon her as the Egyptians did—the parent of all beings. Regarded in the masculine gender, the moon was known as Mityan, the Native cat. (The Egyptians worshipped the cat for the moon.) Mityan's constant wanderings have been satisfactorily accounted for. Attempting to steal another person's wife, the husband very properly gave him a good waddying; and that made him run away ever since. The Port Phillip word for the moon is meni. Bryant's Mythology states that meen is the moon of the Cathites. Meen or maon is the universal mother of the ancients.

Druidical rites were not unknown in Tasmania, though the want of monumental evidence has led many to suppose no identity of superstition. The reader from various remarks in this chapter may infer such knowledge to some limited extent. Of course there was nothing like the completeness of the Celtic system, nor anything equal to that once existing among the hills of India. But there are a few facts known which convey the impression of something more than rude rites. Circles have been recognised in the interior of Van Diemen's Land. Piles of stones have been noticed, evidently of human design in their order. But on the continent of New Holland such evidence is strengthened. Mr. Miles records the existence near Paterson, in New South Wales, of stone circles. One, twenty feet in diameter, has the stones appearing yet a foot above ground, and the central stone a yard in height. The Natives said that "Blackfellow make it long time ago." Mr. Threlkeld saw such at the hills near Lake Macquarie. He was informed that a gigantic eaglehawk had brought them there. Colonel Collins

speaks of perpendicular stones set up by the Blacks in Botany Bay. One tall block is called "the transformed lubra," as some such stones in Ireland, &c. are called ladies, or ladies' fingers.

Crystallomancy was known to the Tasmanians. Every story about their use of stones may not, however, clearly be traced to this. When the Quaker missionaries, Messrs. Backhouse and Walker, were visiting the remnant of the tribes carried to Flinders Island, Bass's Strait, they saw a poor old lubra busy in placing together sundry flat stones, marked variously with black and red lines. These she explained to the strangers were her country people absent from her. One, a larger stone than the rest, represented a fat black woman far away. The mystic meaning of this operation was pretty obvious to the gentlemen, or, at any rate, satisfied them. We do, however, read of the Hill-men of India having a similar practice of placing stones in a row, after daubing them with red paint; and this we know was a mark of respect to their guardian spirits. It is just possible that the Tasmanian was thus in a way communing with the spirits of her friends lost in the Black War. Unwilling to refer to them as dead, she spoke of them as "plenty long way." The South Indian Aborigines are accustomed to put a block of stone in a field, colour it vermilion, and call it their *lal-guru*, or *red lord*.

Many rock crystals have been found in the cists of the ancient North Britons in Caithness. Some have identified them with the Bateyli offerings to the sun; but these were invariably white stones. The Teyl of West Australia, the Murramai of Eastern, is kept in a net of yarn. One shown to Mr. Threlkeld in trembling fear and with perspiring brow by a Native proved to be a crystal the size of a pigeon's egg. The Adelaide Blacks call the larger ones Kauwemuka, and the smaller Kauyappa. They use small splinters of the mystic mineral for the cicatrices of initiation at young-men-making. On the Murray the precious stone is known as Katto or Maako. The Encounter Bay tribe place their Mokani, or charm-stone, between two bound sticks; with the sharp edge they operate to the injury of males, and the blunt part, of females. The Tasmanians called the secret stone, according to the Rev. T. Dove, by the name of Leeka, but the southern dialect had it Heka. Dr. Milligan says the East tribe called it Tendeagh, and the South, Mugkramallee. This crystal

was usually worn in its bag suspended from the neck. The following song of the Tasmanians has relation to objects of superstition:—

"Kano kano wimmari (lizard)
Kano kano kanwemuka (crystal)
Kano kano makkitya (flint)
Kano yeruka makkitya
Makkitya mulyeria."

I have not heard of any flat round stones, like some found in Ireland, Denmark, and Caithness, having a slight depression in the centre, on both sides, as of a thumb mark, unless those noticed by the two Friends on Flinders Island were so. From want of knowledge of Native customs, or contempt for them, travellers are not always accurate in their descriptions, and also not particular in their observations.

The *elf-stone* of the British Isles was a subject of devout reverence with the Tasmanians. They wore these stones as amulets, as is *still* the practice in some parts of England, Wales, Scotland, and Ireland. In Northern Europe generally they are known as thunder-stones. The mystic Salagrama pebble, held in the hand of the dying Hindoo, was a sure preservative against the pains of eternal punishment. This black stone was sacred to Vishnu, and was kept from vulgar eyes in a cloth. The Tasmanians kept their sacred stone in a piece of soft bark or old rag, and concealed it in their hair or other private repository. We read of a "swaddled stone" associated with the Temple of Delphi. It was daily anointed by the priest, and put up in wool. The Egyptian Horus was swathed. The sacred log of Tahiti was bound up. It was the Baitulos or life-restorer of Greek mythology, being once devoured for Jupiter by Saturn, and so restoring the deceased divine children to life. The Phœnicians held such a stone in reverence. The Roman goddess of Hope held it in hand. The swaddled globe of the ancients was the type of dominion. The bundle was surrounded by a cross and held in the hand of the deity.

The coradgee stone of the Australians was also wrapped up and concealed in the hair. As everywhere, it was fatal for a woman to see it, even by accident. It was, as in Van Diemen's Land, presented to the man at his initiation. Not always a simple *white stone:* it was more commonly a quartz crystal. The

Scottish crystal ball, the lee-penny of England, the pixie stone of Cornwall, were all common quartz crystals. Some men by proper use of this magical agency could work wonders. The same men by mesmeric passes drew pain to the extremities, and so from the body.

The stone sucked out by the magic man of the tribe was more certainly of a mysterious character. It was the cause of disease. The Tasmanians, like so many other peoples, believed in the power of the spirits of the dead to inflict pain by such means. The same object could repel bad spirits. The Scandinavians of old hurled such magic stones at spirits. The Lapps to this day shoot stone-headed arrows against the evil ones. The Australians, as elsewhere remarked, thus suck out the source of mischief from the body. With them, as with the Tasmanians, the foreign intruder thus forcibly expelled from the bewitched one was not always a stone; it might be a piece of bone, or a hair, or even an insect. In Africa a grain of corn is thus extracted.

But such deeds of darkness were not confined to the barbarians of the pleasant island of the South. The Cornish people indulged in the usage. In Ireland and the Highlands of Scotland the practice is not forgotten. In Henderson's "Folk Lore" is the story of sharp stones being shot by County Derry fairies under the left shoulder of a cow. An illness is the consequence. An old man—the magic man of that district—comes to the farm, and boils up some water containing a quantity of gunpowder and a crooked sixpence. The cow is made to drink the mixture. "The gunpowder," adds the narrator, "immediately blows out the elf-stone again through the hole under the shoulder, and the sixpence, fitting on the part, covers the wound made there by the stone. The doctor returns into the house with *the stone in his hand*, to be well praised and well paid."

The phallic idea, so strongly represented in every other part of the world as the type of creative force, was not unknown in Tasmania and Australia.

It is not to be expected that so barbarous a people would have the monumental refinements of Egypt, India, Greece, and Rome in the exhibition of this superstition, nor that, having no organized religion, they would attach it to a religious rite, as might be still recognised even with some forms of faith in Europe. While, as with the handling of certain regal regalia

in England, and with the Maypole dances of the village, practices are retained without the idea of their origin, we can no more expect a philosophical explanation of aboriginal usages of a phallic character than of European. All, therefore, that can be done is to compare some observances of the savages with those of other parts.

The corroborie of the Tasmanians, which elsewhere are shown to have a mystic meaning, were some of them evidently of a phallic design. The borees, or private meetings of men in Queensland, may be identified as such. The carrying of a spear, adorned with boughs, round which dances were conducted, reminds one of the thyrsus of the ancients. The mystic dances, at which no women were permitted to be present, related to these ceremonies. It is, however, pleasing to observe that with all the phallic rites of the Papuans, some of which were sufficiently declarative, no indecency of a public nature was permitted. Amidst all the rude drawings and bark sculptures of the Aborigines no improper representations are seen; thus exhibiting a higher tone of moral feeling than is shown in the streets of London, or in the designs of Parisian theatres.

As the moon, Isis, or Latona, was regarded by the ancients as presiding over childbirth, the Tasmanian dances by moonlight might be associated remotely and primarily with that sentiment.

The use also of the magic humming-wood, twirled round the head by a string, and which must never be seen by women and children, has also been placed among the phallic observances. Messrs. Teichelmann and Schürmann speak of the Adelaide instrument as the Kadnomarngutta, and state that the oval piece of wood was five inches long by one and a half wide. Similar things, though formed of stone, were in use among the old British Islanders, the Irish, and the Danes. Some were provided with a groove round the rim for the string. They were oval, and had an incision toward the centre.

The Broad Arrow, evidently connected with ancient phallic rites, and continued to this day like so many usages of forgotten origin, has not only been recognised in Australia, and found by Mr. Stuart in the centre of the continent very far from the haunts of civilized man, but was known in the very early times of Van Diemen's Land, as marks made by the Aborigines, and

not by runaway convicts. The capture parties describe its being in the almost inaccessible Western Tasmania. That mystic part of the triangle, typifying simply the two sexes, without the base of the triangle, the product of such union, is thus alluded to in Wilson's "Solar System of the Ancients:" "If the triangle and pyramid of Belus be divided like fig. 68 A, then the several sections will represent the Babylonian Broad Arrow. The straight lines intercepted by the two apices of each double set of triangles are equal. The areas of all the single triangles are equal. The two opposite triangles which form the arrow-head are similar and equal. The arrow-heads, though dissimilar to each other, have their breadths, areas, and contents equal."

But the prevailing form of development was more of the lingam than of the yoni—the masculine than the feminine.

The Tasmanians, like the Australians, often wore a suspended cylindrical stone. No secret was made of this. In fact, the native baskets of the women occasionally contained the ornament. The Rev. John Inglis, missionary at the Papuan isles of the New Hebrides, refers to the piling up of long-shaped stones under a tree there, and which he deemed a mode of the worship of the spirits Natmasses. By the Rio Negro they wear round the neck a stone of quartz from four to eight inches long by one inch broad, having a hole made throughout; and which, with their implements, was the work of many years. The Irish stones to charm away frogs and vermin are three or four inches long and an inch thick. Mr. Markham remarks of the Uaupés of the Amazon: "A cylindrical white quartz stone is invariably carried on the breast as a charm, suspended by a chain of black seeds." Such is the practice of the Australians, as it is of the women of India, and of the women of Southern Italy: in the case of the latter the charm is less significant in form than that borne by their maternal ancestors, being horn-shaped. The Tasmanian and Australian women, however, sometimes wore the phallus of their deceased lords suspended from their necks. A friend told me he had recently seen the widow of a Gipps Land chief in Victoria bearing such a memorial on her bosom.

There is a rock at Spring Cove of New South Wales called Ky-hy-giber, or Stone of Lewdness. There is a rock at Drogheda, close to the Round Tower, called "The Lady's Finger." There is one Australian dance in which they skip round a figure

held by a man. This is a grass bundle, about eight feet long, having a projecting stick six inches in length. A tradition among the Port Phillip tribes relates how a small bird came "when Blackfellow plenty good," and said, "Beron-beron." This word applies to the generative organs. The Australian tradition of the little lizard which divided the sexes is told with much merriment by the lubras. At a dance on the Devil's River, Victoria, in 1847, Mr. Protector Parker saw sundry paintings on the bark, relative to the Creation, and reminding him of Ezek. viii. 9, 17. The figures have much of the phallic type. The same is used in the Gayip dance.

In association with this subject a reference has been made to eggs. Without doubt the presence of these at ancient mysteries was esteemed as belonging to the new-birth idea. The egg festival of Easter is well known on the continent of Europe, and has but of late become obsolete in Britain. The Cyprus Venus was associated with an egg, and so was the Babylonian Astarte. The festivals were at Easter or spring. The eggs of Green Thursday were formerly devoted to Thor. Pope Paul the Fifth's prayer over Easter eggs runs thus: "Bless, O Lord, this Thy creature of eggs." The spring, likewise, was the festival of eggs with the Tasmanian, though, being on the other side of the Line, it was held in November. Mr. Oldfield has given remarkable particulars about such a festival on the Murchison River of Western Australia. It was called the *Caa-ro*. Strange to say, it was attended with a great gathering of eggs, and it was held in the spring. Women were not present at the ceremonies. The men prepared a large elongated pit of a suggestive shape, and surrounded it with bushes. Round this they danced by night, and feasted on the eggs by day. The phallic character of the festival may be gathered from Mr. Oldfield's words. "Every figure of their dances," he says, "every gesture, the burden of all their songs, is calculated to inflame their passions. . . . As they dance they carry the spear before them to simulate Priapus." The South Australian dance about the Palyertatta reminds one of the Bacchanals. It was a spear upholding a framework of cross sticks, with bunches of feathers at their ends. Sometimes the spear was decorated with shavings of wood as well as bunches of feathers, with human hair wound round the whole length of the spear. It is certainly remarkable that the Lingam worship

should have been known in India before the conquest of that country by the Aryans.

Circumcision is a rite mysteriously connected in the minds of ancient and modern nations with the idea of sacrifice, and is a mode of admission into the family of man. The time of its operation varies from a week onward, though usually performed at the age of puberty. The practice dates from the most remote period, and has doubtless been employed in Africa, the South Sea Isles, and Australia, for several thousands of years.

Although circumcision proper was not practised by the Tasmanians, it was by those of the Australians dwelling on the opposite sides of the continent—North and South Australia. Leichhardt noticed it in North Queensland, King saw it by the Gulf of Carpentaria, and Stokes described that seen at King's Sound, on the north-west coast, as "an exaggeration of an ancient Jewish rite." As practised in South Australia, it varied in character—that on Port Lincoln peninsula being truly "an exaggeration." It was an elaborate laying open on the under side from the scrotum to the apex, and wholly unlike the circumcision of Jews and Africans. This operation at the time of puberty somewhat resembles that described by Dr. Forster at Tahiti. He says the youths undergo a ceremony, when "a piece of bamboo reed is thrust into the prepuce, and the membrane slit by means of another bamboo reed, to which a very sharp edge is given by tearing it." The name of kerto is given to the member by the Adelaide Blacks after such initiation, and the rite is called worringarka. The lizard Yura, now dwelling in the Milky Way, is the reputed author of this ceremony among the Blacks.

The borees of the Queensland natives are secret conferences, condemned by the colonists for association with supposed diabolical practices, and admitted by Davis, for many years a tribal resident, to be "always about women." All that is positively known is, that mystic circles are made, and mysterious rites are performed. They may be similar to the Porrobung ring of South Australia, at which no women are allowed to be present. The trees around have their bark marked with various symbolical figures, representations of animals, &c. Initiation of a superior degree took place on these occasions. The word is said to mean *dropping down*, in allusion to the falling of the novitiate. The Rev. L. E. Threlkeld, referring to the sacred egg of the Lake

Macquarie tribe, assures us that the native word yarro, though signifying fire or water, is used in a mystic sense with the Blacks, and employed by the initiated to show their fraternity.

Other curious circumstances might be mentioned. When Captain Grey was acknowledged as a son returned from the grave by the Natives of Western Australia, he speaks of his reception by the father and brothers in these words: "They threw their arms round my waist, placed their *right knee against my right knee, and their breast against my breast, holding me in this way for several minutes.*"

Mr. Stuart's statement is even more singular. He had penetrated the interior to Kekwick Pond, many hundreds of miles beyond the furthest limit of previous discovery. There he met with an old man and his sons. "After some time," he says, "and having conferred with his two sons, he turned round and surprised me by *giving me one of the masonic signs.* I looked at him steadily. He repeated it, and so did his two sons. I then returned it, which seemed to please them much, the old man patting me on the shoulder, and stroking down my beard. They then took their departure, making friendly signs until they were out of sight." Remarks upon this extraordinary incident are needless.

Young-men-making was not confined to the Tasmanians, but, more or less, formed a superstition in all ages. It is simply a mode of initiation into the commonwealth. The practices of those southern races, so long isolated from the rest of the world, agree so remarkably with those employed on such occasions in ancient days, and with those still in use in many countries, as to furnish the strongest argument in favour of a previous connexion with other peoples acquainted with a meaning for such rites. They all go upon the supposition that man, previous to his entrance into the mystic band, is ignorant, naked, unclean, dead. The novitiate must be purified from the sins of a pre-existent state. Baptism among the ancient Egyptians, &c., furnished one means. The Mexican goddess of waters purged the child from original sin, and brought it anew into the world. Our Saxon forefathers had the baptism of Odin. The aspirant for the Greek mysteries was enclosed in an ark, cell, or coffin, and cast into the sea, to be swallowed up by Ceres. As water is not always plentiful in Australia, the novice is sometimes baptized in dust.

The immersion must be complete. While so lost in dust, or water, the person is said to be dead. When raised by the hand, there is great rejoicing, as there used to be at such a ceremonial among the Phœnicians, &c.

The young-man-making of the ancient mysteries represented the necessity of regeneration before admission into the elect circle. The person must be born again. This, with the Druids of Britain, the Hindoos, &c., was performed by dragging him naked through a hole in a stone. I dare say some of my readers have, like myself, been dragged through an ancient mystic stone cavity under Ripon Cathedral, called after St. Winifred. Our Blacks had their own way of illustrating this fact.

A torment test has been considered essential to initiation. Among the ancients it was severe. With a cruel people like the American Indians, the youths suffer excruciating and prolonged agonies. The Tasmanians and Australians, being a gentler race, had no such custom. In some tribes of Eastern New Holland they lost one tooth or two teeth when made into men. Others were content with subjecting the young fellows to semi-starvation, to bring down their pride of flesh, and enjoining their abstinence from the presence of females for a fixed period, with a forced whispering for months.

The secret to be divulged to the novice was in almost all cases simply something of a phallic nature. Davis, who had been admitted for fourteen years to the mysteries of the tribe, does not scruple to say that such an occasion was "merely a ceremony for the purpose of passing a lad into a certain state of manhood, and to show him how to act with a woman."

A seal of admission was bestowed. With some tribes it was circumcision. With others it was the sponsors giving a new and sacred name, never to be divulged but in the presence of the chosen. With others a white stone was given, never to be shown to women. After the gift, entreaties and threats were used to induce the lad if possible to yield the treasure: he was expected to hold fast. A girdle of human hair was sometimes given them. Even where circumcision was not enjoined, the youth was subjected to the forcible extraction of hair from the pubes. A pubic covering was worn by others. Cicatrices were made then upon the flesh. Arms of men were given, with instructions as to hunting and war.

The sacred enclosure, or kipper ground, was far from the haunts of women, whose approach to the spot would be death. My son saw one in North Australia, consisting of a large circle on raised ground. A pathway was cut thence to a scrub some hundreds of yards distant. The path was about two feet wide, and six inches deep, the sides being thrown up. For several days the poor lads were brought to the gathering, and at sundown were conducted by their sponsors back to the scrub, where they spent the night without fire or food. The doctor repeatedly swung over their heads the mystic humming-stick, which was imagined to be a means of certain grace. They were also breathed upon, besides receiving an imposition of hands.

From all that I was able to gather in my inquiries among very old residents in Van Diemen's Land, it is my opinion that the customs here described, in connexion with young-men-making in New Holland, existed more or less with the different tribes of the Tasmanians.

The tradition of the Oyster Bay natives is given by Dr. Milligan in these words:—

"My father, my grandfather, all of them lived a long time ago, all over the country: they had no fire. Two Blackfellows come; they slept at the foot of a hill—a hill in my own country. On the summit of a hill they were seen by my fathers, my countrymen; on the top of the hill they were seen standing. They threw fire like a star; it fell among the Blackmen, my countrymen. They were frightened. They fled away, all of them; after a while they returned; they hastened and made a fire—a fire with wood; no more was fire lost in our land. The two Blackfellows are in the clouds; in the clear night you see them like two stars (Castor and Pollux). These are they who brought fire to my fathers.

"The two Blackmen stayed a while in the land of my fathers. Two women (Lowanna) were bathing; it was near a rocky shore where mussels were plentiful. The women were sulky, they were sad, their husbands were faithless, they had gone with two girls. The women were lonely; they were swimming in the water, they were diving for crayfish. A sting-ray lay concealed in the hollow of a rock—a large sting-ray! The sting-ray was large. He had a very long spear. From his hole he spied the women, he saw them dive. He pierced them with his spear—

he killed them, he carried them away. A while they were gone out of sight. The sting-ray returned; he came close to the shore, he lay in the still waters near the sandy beach; with him were the women; they were fast in his spear—they were dead!

"The two Blackmen fought the sting-ray; they slew him with their spears. They killed him; the women were dead! The two Blackmen made a fire—a fire of wood. On either side they laid a woman; the fire was between; the women were dead. The Blackmen sought some ants—some large blue ants (pugganyeptietta); they placed them on the bosoms (paruggapoingta) of the women. Severely, intensely, were they bitten. The women revived; they lived once more.

"Soon there came a fog—a fog as dark as night. The two Blackmen went away; the women disappeared. They passed through the fog—the thick, dark fog. Their place is in the clouds. Two stars you see in the clear cold night; the two Blackmen are these: the women are with them; they are stars above."

There are two ways of regarding traditions among savages, if supposed to possess any meaning at all. It is thought by some ethnologists that there is a sort of spontaneous growth among isolated peoples, inducing them by a sense of want to raise huts and manufacture tools, as well as to invent stories of a supernatural character to account for observed phenomena. Others conceive such tales to be the lingering, fading memories of an earlier and a derived idea of a superstition. They regard the almost universal spread of the idea of a Deluge as an instance.

Before attempting any analysis of this singular Tasmanian tradition, given upon so respectable and cautious an authority, it may be well to see if the continental Blacks held any similar views.

Ever since I went to the colonies, I have been accustomed to hear stories of the Bunyip. This mysterious personage was reported to live at the bottom of deep waters, only now and then rising to the surface for the purpose of seizing a lubra, and carrying her down to his subaqueous retreat. The yarns bear a resemblance to those about the kraken of Norway, the sea-serpent, or the floating island-like monsters of American lakes. One, with the head of a horse, and a length of one hundred yards, or fathoms, as is said, was shot by a captain off the

coast of Norway in 1756. Hans Egede, the Moravian missionary, reported one in 1734, with a body as thick as a hogshead, and a scaly skin. H.M.S. *Dædalus* passed near some such creature not many years ago. The Bunyip has been seen as certainly by the Blackfellows of Australia, though the monster persists, as in the other cases, in altering its appearance to terrify spectators, and bamboozle philosophers.

It has been generally admitted that dragon, sea-serpent, lizard, sea-monster, are all one and the same in traditionary lore. The Western Australian natives have a winged water-monster that steals away their wives. The Yura, formerly dwelling among the Blacks, has ascended to heaven, and is now floundering with his scaly tail in the sacred wodlipari ponds of the Yurakauwe—with us prosaically known as the Coal-sack, the dark cloud in the southern galaxy. This celestial Bunyip was the author of the rite of circumcision among the Adelaide Aborigines; as another lizard, the Iberri, was thought the means of the separation of the sexes. The appearance of the little earthly representative of the Iberri causes many a titter and joke among the ebon beauties of the woods. The Murray dragon, Oorundoo, first caused that great river to flow. Having fallen out with his two wives, who must have been dragonesses of a huge size, and not accustomed to water exercise, that Blue Beard of New Holland constructed two lakes, at present known as lakes Victoria and Albert, so that he might effectually drown his partners, who had actually attempted to elope from him with somebody else. It was the great sea-monster Nganno that gave names to places in the Adelaide country. The ugly Wauwai is still reputed to stir the mud of Lake Macquarie in New South Wales. He not only steals lubras, but has been believed to swallow a whole canoe full of Natives. It is hardly probable that, with his love for the female property of the men, he could have been the agency that transformed two lubras into two rocks near the entrance of the lake. Even the Maories knew a great lizard once that was able to drown men. Dr. Lang gives a Queensland tradition of a huge monster which is usually asleep on the sand. Once he awoke, and made a great flood; when next he awakes, he will kill all Blackfellows. It was a big guana, or lizard, that came from heaven, when angry with the Natives, collected them together, and stoned them to death. After this performance, he ascended to his Olympus again.

The first part of the Tasmanian tradition relates how two strange Blacks suddenly appeared on a hill before their fathers, and threw fire down upon them. At first they were very naturally alarmed at the novel sight; but they subsequently returned, renewed the flame, and never lost it after. The two strangers then resumed their celestial stations. Dr. Milligan was directed to Castor and Pollux as the probable place of their abode.

From the days of Prometheus, and before, the heavenly origin of fire has been maintained. Jove threw lightning down. The Indians say the Manitou, pitying the shivering men of earth, threw fire down for their lodges.

The other tradition is much more interesting and suggestive. Two lubras were consoling one another in their sorrows. They had common troubles: each had a faithless spouse; each had a rival at the family evening fire. Though sad and sympathetic, it was essential that they, like other broken-hearted ones, should dine, if only that they might nourish tears. A crayfish might serve the purpose, and both dived into a pool in search of one. But there—concealed in the hole of a rock—was a large watchful sting-ray, or stinging-ray, armed with a spear, a most unusual weapon in such quarters. With the point he transfixed the hapless women, and carried them off on his spit.

But the monster had the audacity to return to the old spot—the scene of his murder—bearing the corpses of the lubras upon his spear. Such conduct merited punishment. Just then the two benevolent fire-bringers appeared. It was another Avatar. They came as naked Blacks again. The sting-ray, little suspecting their neighbourhood, had complacently moored himself, with his victims, in the still, transparent waters, near the beach. He was seen. Charging upon the murderer, they slew him with their spears.

The deliverers of the dead bodies exercised their heavenly benevolence. They made a fire, and placed a corpse on either side. Then, seeking for some large ants, they placed the stinging creatures upon the cold bosoms of the lubras. Even the dead could not withstand such magnetic appeals. The women revived. They lived again.

A fog suddenly steals over the party. The guardian Blackmen disappeared. The women also disappeared in the mystic halo.

It was fitting that, after so much trouble, they should have a reward for their heroic act. Alone in the azure, what more natural than that they should take up the two females to be their lubras there? It is true that they dwell in the stars, but the stars are close together.

In attempting to throw some light upon this fable, I am reminded by the author of "The Early History of Mankind" that "even the stories that have their origin in a mere realized metaphor, or a personification of the phenomena of nature, will attach themselves to real persons, places, or objects, as strongly as though they actually belonged to them. To the subjective mind of the myth-maker, every hill and valley, every stone and tree, that strikes his attention, becomes the place where some mythic occurrence happened to gods, or heroes, or fair women, or monsters, or ethereal beings." Be it so. It is something to find the ignorant Tasmanians and Australians brought into the company of myth-makers.

The sting-ray is the water-monster of story that steals the women. The lubras are the beautiful Apas, the brides of the gods, who, in the Vedic tales, are seized when bathing by the monster Vritra, the serpent or dragon Ahi, and carried to his dark cavern. The water is then poisoned, to prevent any attempting to follow in pursuit. In the Zendavesta it is the lake-monster that seeks to destroy the Tree of Life there.

But deliverers appear. These Jacks the Giant-killers may be the Indra of the Vedas, Perseus, Theseus, Hercules, or Apollo, of the Greeks, Quetzalcoatl of the Aztecs, Atahentsic of the Iroquois, or the Great Hare Manabozho of the Algonquins. As the two Blacks of the Tasmanians, they may be the twin-one Indra and Agni of India, the Castor and Pollux of Greece, the Asvins, &c. Siegfried entered the dragon-hold of the Drachenfeld, and St. George charged the same destroyer on a plain.

Professor Max Müller tells us that the monster is the dark storm-cloud, chasing and ravishing the fleecy maidens of the sky. The fire-god destroys the demon cloud of blackness.

With a spear is the sting-ray killed. This may be Jove's thunderbolt, Thor's club, Odin's ash-stick, or the sword of sharpness. Indra's weapon was the boomerang-like asvattha, that struck and returned again to hand. When Agni and Soma descended to war with the Asuras, the enemies of men, they

fought with lightning to the water's edge. The struggle of the Blacks with the sting-ray was in the water. The lightning plays through the rain of the storm. The fire-stinging or pecking of the ant revived the women. It was the ladyfly of the Scandinavians, the Maybird, or sun-chick, of the Germans, the woodpecker of the goddess Feronia of the Sabine hills, that once brought fire, the reviver, from heaven to man. To this day the English tell the ladybird to hasten home to the sun, and bring fine weather.

The Blackwomen ascended to the stars from the water. The weeping nurses of Jupiter, the Hyades, when conveyed to the heavens, became the constellation denoting the approach of wet weather. The rescued from the Asuras were carried upward. Thor, the raised deliverer of the Saxons, has been identified by some with Holy Thursday, the Ascension-day. The two turkey buzzard saviours of the Blacks are now the bright stars Bungula and Agenor.

As it is usual with many to deride the Tasmanian and his fellow-barbarians for their superstitions, a glance may be taken with advantage at the superstitions of the Europeans. They have been civilized for centuries, and yet even still cling to not a few absurdities. It is the opinion of some that the credulity of the Englishman is growing, that his capacity for the absorption of fables exceeds that of his forefathers, who had no steam-engine, and no penny press. The poor Tasmanian merely surrendered the right of private judgment, and declined to investigate the grounds of belief. He was never behind his age, though indifferent about advancing it. His charms, his exorcisms of the devil, his dread of ghosts, his converse with the dead, his subjection to dogma, are not unknown among even leaders of public opinion in England and America. Books on folk-lore describe country terrors and fears. A Yorkshire lady had her coffin provided with two holes, so that when the devil came to one place for her, she might slip out at the other. Archbishop Whately knew cases where the rider of a piebald horse was thought able to cure the whooping-cough. Child's fat for electric wires has been recently believed in by Spaniards. Charming by pins, &c., still prevails. Russians and Italians spit on a child if praised by a stranger, for fear of the evil eye. The devil is seen by others to be very respectful in the presence of an onion.

Cattle are still passed through the needfire in Britain to avoid disease. Luther and his contemporaries believed in fairy changelings. The divines of England and Scotland were ready to burn witches, and some have great horror of spiritualists now for their conjectured intimacy with improper persons. The Rev. R. Kirk wrote in 1691: "The very devils conjured in any country do answer in the language of the place." The Rev. T. L. Harris exclaimed, in London, in 1860: "The cry of anguish is, 'Who shall cast out the demons who seek to make the body their playground, and the heart their habitation'" As the intellectual world is thus hastening back to exorcism and the sacrifice of independent thought, the Tasmanian, borne down by the uncivilization of thousands of years, may be excused some superstitious fancies.

LALLA ROOKH, OR TRUGANINA, THE LAST TASMANIAN

(*Photographed by* MR. WOOLLEY.)

LALLA ROOKH, OR TRUGANINA.

(*Photographed by* MR. WOOLLEY.)

ORIGIN OF THE TASMANIANS.

In attempting to track the Tasmanians to other and older haunts, to other and now more distant people, we can readily enough detect the characteristics which external organization presents, but not so easily admit, as Count Strzelecki finely describes it, "that it is the instinctive and mental faculties peculiar to each race, and in perfect accordance with the local circumstances in which each race is placed, which constitute the true principles of that classification."

Viewed in the light of that law, whatever similitude may exist between the southern men and other uncultivated races, we grope in outer darkness when seeking an alliance between them and ourselves. Physically, we have relations with them which excite common sympathies, and we seem to know them; but mentally and morally our position as Europeans is so different, and our means of studying them are so slight, that we are unable to comprehend our identity with them. We cannot gauge their inner nature, and they shrink as sensitive plants at our investigation. We cannot ask questions, less from our conviction that we shall elicit no satisfactory reply, than from our consciousness of inaptitude to put them. They volunteer no utterances, less perhaps from their darkness of intellect, than from their self-consciousness of utter estrangement, and the want, as it were, of an atmosphere of communication through which their sepulchral tones may be transmitted.

One thing relative to their origin is very clear, that they owe but little to the race from which they sprang. If, as seems highly probable, they were intimately connected with, if not derived from, the Dravirians of Southern India, their acquaintance must have been before the advent of the more polished and progressive Aryan race, or they would have had, otherwise, some

relic of that advancement to show. The chapter on "Superstition," may excite a belief of some knowledge of a prior civilization, or lead one to regard the apparently similar development of ideas, up to a certain limited point, in peoples without geographical influence on one another. We have the association of language also to aid our researches. There would appear a shadowy mysticism in some rites allying them to higher forms of life. But symbols to meet the eye are so rare as to be but slightly helpful. When we meet the cross upon the walls of ancient Egypt, on Asiatic monuments, in Phœnicia and Greece, on Roman-Gothic villas of pre-Christian age, in Celtic ruins, and, astonishing to the invading Spaniards, sculptured on the temple walls of Mexico, we can trace the presence of one thought or influence, even though unable to unravel the intricacy of descent. In Australia and Tasmania no such permanent records of unity meet us.

I have transcribed the following curious paragraph from the *Hobart Town Gazette* of September 2d, 1826:—

"A small copper coin has been ploughed up at New Town, which, however unwilling soever we may be to indulge in chimerical fancies, certainly gives rise to many interesting conjectures. It bears the appearance of great antiquity, and the die or stamp which impressed it must have been very deep or rudely engraved, the figures being in high relief. The obverse is a crowned head, which bears no resemblance to anything European of the kind. The countenance with a beard is in profile, the facial angle of which is greater than we generally find in the Black race; but were other circumstances to fix its origin in this island, we do not think that of itself would subvert it. There are on the side four or five letters or characters which we cannot decipher, or ascertain to what alphabet they belong. The reverse is a naked figure, that resembles an aboriginal native when he is in the act of throwing a spear. The coin has been kindly placed in our hands by the finder, whose character for veracity is indisputable. We know that two men, both unfortunately unable to read, discovered some time since a stone covered with characters, in a cave in the bank of the river Styx, which they broke and destroyed. We ourselves have, we must confess, seen various figures and emblems cut or drawn on the inner part of the bark which composes the rude huts of the Natives; but

whether they, and the characters on the stone above alluded to, were engraved by the inhabitants, or by some runaway prisoner who had associated himself with them, we do not take upon ourselves to determine." We suspect that the connexion existing between India and the colony may account for the coin, while the stone and bark characters were most certainly executed by the Natives.

It has become customary of late years to speak of the Tasmanians and Australians as of a distinct species of man, though Dr. Waitz goes further in polygenistic ideas, and writes: "New Holland and Van Diemen's Land are not connected, anthropologically considered." Some argue for a specific creation for almost every nation, and for the Tasmanians in particular.

The Salamanca divines were much opposed to the idea of Columbus, that the world was round; for, said they, to talk about people on the other side of the earth is to suppose men not derived from Adam, as none could pass the intervening ocean. The learned and excellent Dr. Pye Smith, some thirty years ago, ventured to suppose other races than the Adamic, in order to reconcile some difficulties about Cain founding a city, &c. Others imagined that Paul's declaration of "one blood" settled the question. But Dean Alford informs us, that in fourteen important MSS., including the Vatican, Alexandrian, and the "Codex Sinaiticus," the word *haimatos* is omitted, and the one blood-relation not maintained. The word *man*, in the text of 2 Cor. xv. 45, is also omitted in the Vatican and other MSS. St. Augustine appears to have been the first Christian Father contending for the derivation of all men from Adam. It is certain that Genesis refers to three very distinct persons in the children of Adam, of the Elohim, and of the Nephilim.

"The question of unity of species," exclaims a continental philosopher, "remains an open one." Johannes Müller writes "to know whether existing races of man descend from one or from many primeval men,—that is, that which cannot be discovered by experience." Professor Waitz, in his "Anthropology," assures us "we cannot obtain from science any clue as to the origin of man." The sage William Humboldt is content to say: "We do not know, either from history or authentic tradition, any period of time in which the human race has not been divided into social groups."

There is no agreement as to the number of varieties into which the human family may be divided. Blumenbach gives five; Pickering eleven; Bory de St. Vincent fifteen; and others eleven, twelve, &c. A multiplication can easily follow, when we have Mr. Reid saying of two neighbours, the Fuegians and the Patagonians, "One resembles the other as much as a bull a bluebottle." Linnæus simply gave White, Red, Yellow, and Black. Leibnitz had Europeans, Laplanders, Mongols, and Negroes. Kant called them White, Copper-coloured, Black, and Olive-coloured. Hunter extended the list to Black, Blackish, Red, Copper-coloured, Black-brown, Brown, and White. Blumenbach preferred to call them Caucasians, Ethiopians, Mongols, Americans, and Malays. Buffon had the family of Northerns or Laplanders, Tartarian, South Asiatic, Blacks, Europeans, and Americans. Pritchard adopted those of Iranians, Turanians, Armenians, Hottentots, Bushmen, Negroes, Papuas, and Alfourins. Pickering's classes were Whites, Mongolins, Malays, Indians, Negroes, Ethiopians, Abyssinians, Papuans, Negritos, Australians, and Hottentots. Agassiz selects the classes of Arctic, Mongol, European, American, Negro, Hottentot, Malay, and Australian. Professor Huxley has five only.

While some contend that these varieties were originally one, others regard them as independent creations. Sir Charles Lyell observes: "If the various races were all descended from a single pair, we must allow for a vast series of antecedent ages, in the course of which the long-continued influence of external circumstances gave rise to peculiarities increased in many successive generations, and at length fixed by hereditary transmission." "At any rate," Dr. Owen acknowledges, "it is only with regard to the Australians and Tasmanians I can feel any confidence in detecting the distinctive characters of a race." The great ethnologist Latham says: "The Aborigines of Van Diemen's Land, commonly called Tasmanians, have a fair claim, when considered by themselves, to be looked upon as members of a separate species."

There is nothing antagonistic to a reverential and religious spirit in holding the plurality of species; for Niebuhr, in one of his letters, writes: "I believe that the origin of the human race is not connected with any given place, but is to be sought everywhere over the face of the earth; and that it is an idea

more worthy of the power and wisdom of the Creator, to assume that He gave to each zone and each climate its proper inhabitants, to whom that zone and climate would be most suitable, than to assume that the human species has degenerated in such innumerable instances."

Mr. Darwin has made the *species* idea more popular to the educated mind. Baron Cuvier once said: "If we begin to make species, we cannot stop short." Professor Agassiz speaks of "distinct primordial forms of the types of man;" and elsewhere: "The unity of species does not involve a unity of origin, and a diversity of origin does not involve the plurality of species." M. Geoffroy declares that "the permanent varieties of men, permanent, at least, seemingly during the historic period, originate in laws elucidated in part by embryology, by the laws of the unity of organization; in a word, by the laws of transcendental anatomy."

M. Blanchard, companion of the voyager Captain D'Urville, maintains that there exist different species of man. Dr. Prosper Lucas informs us: "The psychological diversity of races is, as we have said, as thoroughly demonstrated as their physiological." Messrs. Nott and Gliddon, in their "Types of Mankind," contending for this notion, say, when referring to the skulls of the Indian and the Bosjesman, "Osteologically they are as different from each other as the skull of a fossil hyena is from that of a prairie wolf." Dr. Broca, of Paris, considers that all animals capable of producing an eugenistic progeny are of one species, and that with man this is not the case. Mr. Nott was so struck with the African lineaments of the Southern people, as to found thereon an argument for his polygenistic opinions. "The supposition," says he, "of any community of origin between these Australians (with Tasmanians) and the true Nigritians, neither of them migratory races, and widely separated by oceans, would be too gratuitous to merit refutation. So also would any hypothesis based on climatic influences, when the zones of their respective habitats are as opposite in nature as the races of Malaysia are distinct from those of Africa, and, at the same time, geographically remote." But, as may be seen elsewhere, the supposition of an altered geological state of things would remove that difficulty, and furnish an evidence of a closer union of peoples.

That which has led so many learned men to deny the "one origin" doctrine, has been the recognised existence of races, like the Tasmanian, that had evidently made no perceptible progress in civilization during vast cycles of time.

When the cysts of Caithness and the Orkney Isles were opened, the weapons were found rudely manufactured of the stone of the district. This induced Mr. Samuel Laing, their discoverer, to declare of the people, "They could not have come in contact with more advanced races. It makes it improbable, also, that they could have been degenerate descendants of more civilized races, or a band of emigrants or outcasts." This question bears upon the present subject of inquiry—the origin of the Tasmanians. Mr. Bradford, the American antiquary, thus forcibly presents the difficulty: "If we are justified," says he, "in asserting for many barbarous tribes a descent from more cultivated ancestors, it becomes proper to examine whether there are any substantial grounds of distinction, including a difference of origin, between the two great divisions—the barbarous and the civilized."

In the catechism of the Parsees of India occur the following remarkable question and answer: "Was Gayomars the first man?" The reply is: "According to our religion he was so; but the wise men of our community, of the Chinese, the Hindus, and several other nations, dispute the assertion, and say that there was population on the earth before Gayomars."

It is sufficient for my purpose that I have shown, and shall still further show, the connexion of the Tasmanians with other races, and thence, at least, the high probability that they are not the specific creation of a degraded and necessarily unprogressive type of humanity. Their positive ability to recognise God and obey His laws ought certainly to bring them within the bonds of brotherhood.

That the Tasmanians—whether a distinct creation, an affiliated people, or a transmuted race—are of high antiquity, even as regards other inhabitants of the world, can admit of little doubt. It is amusing to find one author, Mr. Mackenzie, so determined to oppose the antiquity of our islanders, and their Australian friends also, that he declared his conviction that nearly the whole of the Southern region there had risen from the sea within the last two hundred years or so, for that a Dutch

navigator records having sailed across the sea on a parallel now in the heart of New Holland!! The Frenchman who affirmed that this home of the colonists had fallen from the moon was as correct.

A strong argument for their remote age may be gathered from their ignorance of navigation, which is equally apparent in their neighbours across the Straits. The light-coloured Pacific Islanders, from north to south, and east to west, agree in their tradition of having reached their present abode from some other place. But these peoples are to this day possessed of good seaworthy vessels, and undertake long and perilous voyages. It was not so with the natives of New Holland and Van Diemen's Land. They have no traditions of descent. They were without any but the very simplest modes of progression on the water.

Considering them, therefore, as a race so ignorant of the means of traversing the ocean, that they must have come overland from their primeval seat, how vast, in all probability, must that period be during which their lands have become disconnected with the region that originated the race? How far are they now from the continents of Asia, Africa, America! Judging from our knowledge of the slowness of geological changes, especially from the isolation of such a mass of land as Australia from the main continent, it will be apparent to any that our dark friends have been tenants of their new home, upon this theory, for a period of many, many thousands of years.

When the Australian and Tasmanian geologists are able to explore their colonies,—when the continent especially shall have been surveyed as efficiently as that part of Victoria which has been done under the care of Mr. Selwyn, late Government geologist,—then we may have revelations like those from the caves and recent tertiaries of Europe, and remains of man discovered under circumstances of well-recognised geological antiquity. Wellington Cave, to the north-west of Sydney, has excited much interest among the *savans* of Europe and America. There, torn from the bone breccia of the floor, we have remains of gigantic extinct forms of animal life. A more careful and lengthened survey of that and other caves may yet produce some interesting human relics.

An important discovery has recently been recorded in a paper published on the Ballarat Gold Fields. Digging twenty-two

inches below the surface, in a place which evidently had never been before disturbed, a person came upon a basaltic stone weapon or tool-head, previously described. It was eight inches long by four broad, and weighed five pounds. There is no doubt of its being the work of the Aborigines. But the burial of it under so large an amount of deposit would sanction the idea of considerable antiquity. Sir Thomas Mitchell, who always upheld the theory of the great age of the Aborigines, once said: "Perhaps the iron tomahawk is the only important addition to their implements during the last three or four thousand years." And the Rev. Dr. Lang, whose orthodoxy no colonist questions, is constrained to say, "We are warranted, from the phenomena presented in the existence and diffusion of the Papuan race, to claim for that race the highest possible antiquity reconcilable with the past diluvian history of man."

A strong case may be made out from the botanical developments of Australia and Tasmania. As the existing forms of vegetable life remarkably coincide with those of the oolitic period of Europe and America, it might, by parity of reasoning, be argued that existing man in Australia and Tasmania would be of an age anterior to his appearance elsewhere. Some, who esteem such people as little above the brute, and preach the advance, and ultimate perfectibility, of the human race, would approve of the suggestion of the Black's prior appearance, as the lowest in the scale of humanity, and as being, with the negro, the type of unprogressiveness.

Sir Samuel Baker has ventured to assume a geological reason for the isolation and antiquity of the low-developed, barbarous, and unimprovable people of the equatorial plateau of Africa. They are so brutal, and so ignorant, that he cannot account for their appearance other than by imagining them a primitive race, undisturbed by later geological phenomena, and without contact with tribes of more recent origin dwelling on tertiary or post tertiary rocks. His argument is thus put: "The idea is suggested by the following data. The historical origin of man, or Adam, commences with a knowledge of God. The world, as we accept the term, was always actuated by a natural religious instinct. Cut off from that world, lost in the mysterious distance that shrouded the origin of the Egyptian Nile, &c., historic man believes in a Divinity; the tribes of Central Africa

know no God. Are they of our Adamic race?" Sir Roderick I. Murchison helps him, as he thinks, by granting the region to be one of secondary rocks, with no subsequent volcanic eruptions, and, therefore, being quiet amidst the tumult of a tertiary era. The intrepid and dashing traveller, however, leaps over the more cautious theories of geology, and assumes for his living *pombé*-drinking Blacks an antiquity not yet contemplated for the artistic Reindeer men of the Pyrenees, or the rhinoceros' companions in Britain.

Mr. Protector Parker did well to express his astonishment at the singular position of the Tasmanians, when saying: "It is one of the many strange anomalies of Australian geography that a branch of this Papuan race should have been found in Australia, whose woolly hair and blacker complexion clearly distinguish them from the continental Australians, and yet that no branch of the same family should be found on the shores of the mainland nearest the presumed locality where the race originated." Whatever arguments may be adduced from this extraordinary fact of the isolation of the so-called woolly-haired people, it will, at any rate, furnish another evidence of the extraordinary relative antiquity of the Tasmanians.

While claiming a high antiquity for the Tasmanians, it is not correct to admit the argument presented by some writers, as deduced from certain heaps of shells near the river Derwent, which were thought to have been the remains of old aboriginal feasts. The geologist, however, sees fit to pronounce them ordinary deposits of marine shells of recent species, belonging, perhaps, to a post tertiary era, rather than the refuse of savage feasts, after the manner of the Danish "middens." One mound of the Semangs of Malaya has been considered to contain 20,000 tons of shells. The objections are as follow:—The Derwent stratum is even and extensive, and not a series of heaps; the bivalves, usually opened after roasting, are mostly crushed in the formation; while the univalves, that the Natives crushed to get at their contents, are found here whole, and of a size so small as hardly to be used for food. The shells are, however, represented in the waters of the island at the present day. The deposit rests upon a bed of rounded pebbles, which, as Mr. Wintle of Hobart Town remarks, would hardly be preferred to the greensward as a cooking-place.

American writers have discoursed upon the great antiquity of the Red man. They show his existence on the monuments of Egypt. On the tombs of that country are seen the three great varieties of red, white, and black. Of their gods, Osiris was black; Typhon, red; and Horus, white. In the Indian Trinity, Brahma is red; Vishnu, black; and Siva, white. Mr. Schoolcraft is carried on in his argument by reference to philology. He notices the agreement of the dialects of Indians in concord; but adds: "Such diversities in sound, amounting, as they do in many cases, for instance in the stocks of the Algonquin and Iroquois, to an almost total difference, must have required many ages for their production; and this fact alone affords a proof of the continental antiquity of the American race." He concludes about this distinctive people: "It probably broke off from one of the primary stocks of the human race, before History had dipped her pen in ink, or lifted her graver on stone." Cannot the same be said of the Tasmanian?

The entrancing story of the Pyramids, from the pen of Mr. Piazzi Smythe, will prepare some persons who are not well posted in science, to realize long numbers of centuries. Some two thousand odd years ago the chattering Greeks told the tale of the Nile. They beheld the land of the Pharaohs in its decadence. They wondered at the hieroglyphics, and could find none to read them. But between that temple age and the day of the Pyramids was so vast an abyss of time that they could divine nothing about it. Mr. Smythe proves that the Great Pyramid was erected by a race long anterior to that of the Egyptians, and that the builders were men of gigantic powers of thought, and with a prodigious extent of material resources.

Upon a mummy in the British Museum is inscribed a zodiac, representing a certain arrangement of stars which indicate 1722 B.C. Professor Mitchell wrote from London to his American Observatory assistant, requesting him to send him, from calculation, the relative positions of stars for the equinox of 1722 B.C. When the diagram arrived, it corresponded exactly with the figures on the coffin. This gives us a base for our argument. Thirty-six hundred years ago Egypt was flourishing with hieroglyphic writing. Judging from the growth of other nations, a long period must be granted for the development of that civilization. Baron Bunsen would say seven thousand years ago.

And yet a vast period stands blankly before us between the rise of the Egyptians, with a type of civilization not unlike that of the valley of the Ganges, and that marvellous and peculiar type of advancement exhibited in the Pyramidal age. Giving that unknown people—without hieroglyphics and without images—time for the growth of their knowledge, unless miracles be worked for them which are denied to other races, we are thrust backward still further into the dusky past.

On the sides of a post-pyramidal tomb of Egypt we may still see physiognomies of human varieties after the present order, with some so peculiar to our eyes as to be considered extinct varieties. The Asiatic and African are as clearly defined on that monument of four thousand years ago as in our own day. The colours of races were then as now. Dr. Gliddon, of the United States, our great authority as an Egyptologist, speaking of this permanency of type, asks, "If five thousand years, as proved by every possible testimony, have done nothing (to change type), how much will any time do?" Changes must be slow indeed, when, according to Dr. Morton's "Crania Ægyptiaca," we have an ancient mummy of a negress from the sacred isle of Beyhe, of the Nile, having the jaw and woolly hair of the present negress. Can one wonder, then, that Dr. Mouat should claim five thousand years, at least, for the isolation of the Andaman islanders? Sir John Lubbock asserts that "the principal varieties of man are of great antiquity, and, in fact, go back almost to the very origin of the human race." Sir Charles Lyell warns us of "the insignificance of thirty or forty centuries in the history of a species;" and then, as a consequence, talks of the "complete isolation for tens of thousands of centuries of tribes in a primitive state of barbarism."

The Tasmanians, then, may have been, for several or many thousands of years, isolated from the rest of the world of progress, and in the same anti-progressive condition in which we found them.

A few other broadcast illustrations and authorities will suffice to bring the Antiquity of Man before us.

A human skull, near Falkirk, was discovered twenty feet below the surface, and associated with the fossil elephant. In Essex such remains have been side by side with the hippopotamus and rhinoceros, which then roamed about all England.

At Curragh, an older Irishman than the Celt hunted after what we call the fossil elk. The Betages, or slaves of the Celts, may have been his descendants. Man has been found with the extinct mastodon in Charlestown, and a flint knife in the auriferous gravel of Kansas. A jaw was brought up from the conglomerate of a coral-reef at Natchez; the learned have calculated a hundred thousand years for the formation of the southern half of the peninsula where this lay. In several places in Brazil, in very hard breccia, man's skeleton has been identified by Dr. Lund with the extinct ape. In the province of Minas Geraes human bones were lying alongside of thirty-four species of extinct animals, including the fossil horse. That wonderful book, Lyell's "Antiquity of Man," brings a multitude of similar instances from European caves. The men of an older France dwelt with the reindeer there, while Belgium unfolds the history of even a more ancient people, dwelling, like some in Ireland, at the close of the great glacial period, when most of Europe presented the appearance of Northern Greenland. Such narratives lead us to exclaim with the author of "Prehistoric Man,"—"The world's early historic chronology has yet to be revised."

But, perhaps, the most interesting announcement upon this subject is from the Government Geological Reports of Professor Whitney, of California. It is of the discovery of a human skull, 130 feet from the surface, in pleistocene gravel of bone breccia and volcanic ash, encrusted with a layer of carbonate of lime. The bone is of great thickness, having a fair facial angle, and may now be seen at the State Geological Survey. It was under several layers of volcanic matter, which poured forth at the elevation of the gigantic Shastl. The skull was in earth deposited before the glacial age, which was after the great volcanic movement, and it was found associated with the bones of the mastodon and extinct horse.

If not weary of quotations, the reader is requested to study the following important observations of Professor Huxley:—

"Considering what is now known of the more ancient races of men, seeing that they fashioned flint axes, and flint knives, and bone skewers, of much the same pattern as those fabricated by the lowest savages at the present day, and that we have every reason to believe the habits and modes of living of such

people to have remained the same from the time of the mammoths and the tichorhine rhinoceros till now, I do not know that this result is other than might be expected. Where, then, must we look for primeval man? Was the oldest *Homo sapiens* pleiocene or miocene, or yet more ancient?" Sir John Lubbock thinks that, "according to all palæontological analogies, he must have had representatives in the miocene times."

As man has been found in the mammoth day of Europe, he must have lived before the Straits of Gibraltar existed, and before the rise of the Sahara from the ocean. Dr. Wilson's primitive Scotchman "guided his tiny canoe above an ocean bed which had to be upheaved into the sunshine of long centuries before it could become the grand arena of deeds that live associated on the historic page with the names of Agricola, Edward, Wallace, and Bruce." The wild aboriginal Briton held his cannibal feast in the Kent's cavern, Torquay, when that which is the bed of the English Channel was a mighty forest, in which the rhinoceros and cave bear had retreats.

The great wonder is, that these ancient races were so like the Tasmanians in their manner of life, and that the latter should have had an arrested development for so long a time! Dr. Karl Vogt recently said: "Our primeval Europeans were no doubt savages in the fullest sense, even those of a white skin being distinctly inferior, as far as we can make out, to the lowest of modern savages—the Australian."

Professor Huxley, after examining some remarkable skulls found in the shell-mounds of Europe, has this comparison: "The face must have had as prognathous a character as that of an ordinary Australian. Indeed, the left half of an *appia maxilla* corresponds with great exactness with the corresponding part of a bisected skull of an Australian native in the Hunterian Museum. I should be inclined to look among the Papuan races of New Guinea or New Holland for the nearest allies of men to whom the shell-mound once belonged." Mr. Samuel Laing thought his Caithness man more closely resembled the Australian and Tasmanian than the Laplander or Esquimaux. *A Scotchman like a Tasmanian!!*

The one peculiarity above all others which exhibits the wonderful likeness of the Tasmanians to the most ancient people of the Drift Period of Europe is this,—*they alone, of all the known*

races of the world, were without man's natural companion—the dog!!!

Upon the so-called *Papuan* character of Tasmanians and Australians opinions so differ among the learned, that I think it better to present the authorities together.

The distinction between Papuan and Alfouran is drawn by M. Lesson. The Alfourans, according to that French author, have large eyes, long and slender legs, prominent teeth, rough shining black hair, hard and thick beards. He describes them as the true Aborigines of New Holland and the interior of New Guinea. He gives them, however, lank hair, which is more like the American Indian than Australian. He connects these Alfourans with the Blacks of the Molucca interior and Luzon, declaring them the true Endamenes of the Papuans. Mr. Bruijn Kops would divide the population of New Guinea into Papoeers and Alfoeren. The first, living on the shores, are in a constant state of hostility with the others, who live in the mountainous interior. The word "Alfouran" is thought by some to be derived from a Portuguese word signifying *outside*, or beyond civilization. The Dutch generally apply the word to the tribes in the interior of the Moluccas and part of New Guinea; they call the rest New Guinea Papuans. The word is not, in Mr. Earl's view, a generic name for any particular race. M. Maury thinks the Alfourans intermediate between the Papuan and Malay, and places them higher in the scale than the Papuans. The word he derives from the Portuguese *Alforias*, slaves. Mr. Latham says that "the notion that the Alfurs of the Moluccas are in any degree Negrito, or that the term Harafura can with any ethnological propriety be connected with the adjective *black*, may fairly be said to have received its deathblow."

The Papuans (which name is the Malayan *Poua-Poua*, or *Papua*, curled or frizzled) are known by some as the Oriental Negroes. M. de Boudyck-Bastiaause, in his "Voyage to the Moluccas," asserts that, though the islands to the north are a mixed people of Ceramese, Javanese, &c., the Papuans were the original and exclusive Aborigines there. Mr. Kops describes the Papuans of New Guinea as small in stature, with black, crisp hair, high but narrow forehead, dark eyes, flat, broad noses, large mouths, thick lips, and good teeth. There have been writers erroneously classing them as a cross between the Malay and the African

negro. Mr. Pickering draws a distinction between the Negrillos and the Papuans, saying that the former are more diminutive, and with aggravated negro features. He instances the Andamaners as Negrillos; though Dr. Mouat, the authority, mentions the Andamaners as being, though small, perfect in figure, with fine foreheads, and wholly unnegrolike. Mr. Earl, one of our ablest writers upon the Indian Archipelago, uses this language: "That the Papuan race is the most ancient of the races inhabiting the Indian Archipelago cannot, I think, be doubted. It is extremely probable that they occupied originally all the islands of the Archipelago, large and small. They have at length been found in the interior of Borneo, near the source of the Kotto River, on the west coast. They appear to have been originally genuine ichthyophagi, and therefore dwellers on the coast."

M. L. F. Alfred Maury, in his "La Terre et l'Homme," draws the following distinction between the two:—"The Alfourans constitute a race intermediate between the Papuans and the Malays. They ought to be considered as the issue of the crossing of these two stocks. They inhabit Borneo, Celebes (where they are called Turajos), the Moluccas, Mindanao, and several other islands. They are brave, intelligent, and very superior in connexion with moral qualities to the Papouas." He properly observes that "the usage of scarifications upon different parts of the bodies distinguishes the Papuan race."

As to the Papuans, in the work of Messrs. Lesson and Garnot, we have this account: "The colour of the skin is black, mixed with one-eighth part of yellow, which imparts to it a clear tint of various intensity. The hair is black, very thick, and moderately woolly. They wear it frizzled out in a very remarkable manner, and let it fall upon their necks in long and twisted masses. Noses somewhat flattened; chins small and well formed. Their cheekbones are prominent, their foreheads elevated, their eyebrows thick and long; their beards are thin."

Captain Freycinet, commander of the French expedition in 1817–20, the ships *Uranie* and *Physicienne*, believes the New Hollanders to be Papuans, and identifies the mountaineers of Vaigion as Alfourans. "The heads of the Papous," he says, "present a depression of the anterior and posterior parts, at the same time as an enlargement of the face. The summit of the head is

raised; the parietal bosses are pre-eminent; the temples very convex; and the crown below the semicircular line of the upper sides of the head offers a remarkable projection. The bones of the nose, almost vertical, depressed before and behind, have little projection; they are limited at their middle part, and enlarged upward and downward."

Mr. Wallace has given much attention to the subject. He says of the Malay and Papuan: "If these two great races were direct modifications, the one of the other, we shall expect to find in the intervening region some homogeneous indigenous race presenting intermediate characters. In the Malay Archipelago we have an excellent example of two absolutely distinct races." While Mr. Huxley thinks the Papuans allied more with negroes than any other race, Mr. Wallace sees "difficulties in the way of accepting it as probable or possible." Elsewhere the latter finds an intermediate in the so-called Alfuros of Gilolo; of whom he writes: "Their stature and their features, as well as their disposition and habits, are almost the same as those of the Papuans; their hair is semi-Papuan, neither straight, smooth, and glossy, like the true Malays, nor so frizzly and woolly as the perfect Papuan type, but always crisp, waved, and rough, such as often occurs among the true Papuans, but never among the Malays. Their colour alone is often exactly like that of the Malays, or even lighter." His conclusions are thus expressed: "I believe that the numerous intermediate forms that occur among the countless islands of the Pacific are not merely the result of a mixture of these races (Malay and Papuan), but are to some extent truly intermediate or transitional, and that the brown and black, the Papuan, the natives of Gilolo and Ceram, the Fijian, the inhabitants of the Sandwich Isles and those of New Zealand, are all varying forms of one great Oceanic or Polynesian race." In the capacity of their skulls, Mr. Wallace finds them "so nearly identical with some of the Malayan groups as to offer no clear points of difference."

Quatrefages, the great Unity advocate, places them as "hybrids between true Negroes and a Malayan or yellow race." Mr. Latham will not believe the Alfouras to be Blacks, and declares: "I believe that the whole doctrine of the existence of anything deserving the name of Negro or Negrito to the west of New Guinea as destined to die out."

In the ethnological chart of the *Novara* expedition the Papuans are placed over all Australia and Tasmania, and over New Guinea, excepting its eastern province, and a little of the south-west coast. In Baer's splendid plates, the Papuan head is long, but broad at the parietals, and narrow at the frontal. Fleurien describes those of Santa Cruz as "black as the negroes of Africa; all have woolly hair." Surville identifies the Papuan type in the Solomon's Isles; "they have the hair woolly and black, the nose thick and flat." Méares finds the same in the Tatee Isles; saying: "They have a woolly head, the skin of a bitumen black, and all the traits of the Negroes of Africa."

Messrs. Lesson and Garnot have fully expressed their views in the *Annales des Sciences Naturelles* of 1826. They describe the Papuans, including Tasmania, the New Hebrides, and New Caledonia, in these terms: "Their hair is black, very thick, moderately woolly; the nose a little depressed, and nostrils transversely enlarged; the chin is little and well made; the cheekbones are projecting; the forehead is raised; the lips are thick and long; the beard is rare." They speak of their colour as "deep black," their hair as "short, woolly, and very curly," and the facial angle as "moderately acute." They connect the Papuan family with use of red mixture for the hair, cicatrices on the body, roasting of food, and lying on the ground by the fires. Though placing the Australians distinct from the Papuans, all these signs of the latter apply strictly to the former. But as they found the cicatrices, &c. in Madagascar, they say the Papuans "have the greatest resemblance to the Caffro-Madecasses." Of these they declare, "The *ensemble* of their traits would serve in great part to trace the portraits of a Papuan of Dory, of New Ireland," &c.

Mr. Pritchard would distinguish the Papuans by the practice of cicatrices. Not able to recognise the French voyagers' distinctions, he divides the Papuans into two divisions. Some use the word Kelœnonesians, as indicating the frizzled-hair race. The Melanesians are the wild men of the negro group of the Solomon's Isles, New Britain, New Ireland, &c.

Péron, sixty years ago, showed the points of difference between the Tasmanians and their New Holland black friends, though with better knowledge of both he would have greatly modified his views, as he would have recognised in their customs, usages,

and arts enough to characterise both as from one common parentage. But there is a freshness in his story. He speaks of

"The absolute difference of the races which people each of these shores. In fact, if we except the thinness of the numbers, which we observe equally with the two peoples, they have almost nothing in common, neither in their customs, their usages, their arts, nor in the instruments of the chase or fishing, their huts, their canoes, their arms; neither in their language, nor in their physical constitution altogether, the form of the skull, the proportions of the face, &c. This absolute dissemblance is reproduced in colour; the natives of the isle of Diemen are much darker than those of New Holland. It is exhibited in a character which every one agrees to regard as the most important of those which serve to distinguish the various races of the human species; I mean to speak of the nature of the hair: the inhabitants of the land of Diemen have it short, woolly, and crisp; those of New Holland have it straight, long, and stiff. How to conceive now that an island of sixty leagues at most, which is found thrust to the confines of the Eastern hemisphere, and separated from any other land by distances of five, eight, twelve, and even fifteen hundred leagues, can have a race of men absolutely different from that of the vast continent which is near it! How to conceive this exclusion of all relations, so contrary to our ideas upon communications of peoples, and upon their transmigrations! How to explain that deeper colour, this crisp and woolly hair, in a country much colder! All these anomalies, so singular, are a proof of the imperfection of our theories."

The French naturalist accounts for the difference on geological grounds, thus: "That the separation of the land of Diemen from that of New Holland is anterior to the epoch even of the two countries; one can have little doubt, in fact, that, if at the time they had been joined, their inhabitants would have belonged to a common race, and more likely to that whose ferocious tribes now occupy all New Holland."

The Tasmanian appears isolated, therefore, even from the Australians, with whom he shares common rites, habits, beliefs, and sympathies. His hair principally distinguishes him from the New Hollander. We wonder not that Strzelecki was unable to identify him with others on the continent. Professor Huxley

classed him with the Negro. He described the region "through the Hebrides to New Caledonia, which is entirely peopled by the negroid type, except by some imported by Polynesian emigration; then there is a great gap between the Fiji Islands and Tasmania, and the last point you meet with the negroid type is in Tasmania, where the people are totally different from the Australians, and exhibit all the marked characteristics of negroids." Yet Dr. Pickering saw the Australian "having the complexion and features of the Negro, with hair in the place of wool." Pritchard places the Tasmanians separately from the Australian, saying that they "are decidedly of Pelagian Negro stock. The compressed, elongated form, with prognathous jaws, may be recognised in the skull." He shows that the fellow Papuan of the Viti Islands has a similar cranium, in the ample size of the coronal ridge from which the head slopes down on each side, in the convexity of the parietal bones, in the narrowness and lateral compression of the forehead.

Some further notice of these dark races which are allied to the Tasmanians may elucidate the subject. They are found scattered over a vast area, not only in the Southern Sea, the Indian Ocean, the North and South Pacific, but on the mainland of Asia, and are everywhere, more or less, a savage, unprogressive people. We have the testimony of Mr. Logan that "these Tibeto-Indian tribes of the Indian Archipelago, which have been most excluded from the continual influx of ultra-Indian and Indian influence, and in which the African elements are the strongest, have the nearest affinity to the Polynesians."

New Guinea furnishes many tribes of these peculiar Aborigines, to whom reference has already been made. Mr. Modena found trees full of them, like monkeys.

Borneo, says M. Rienzi, is the cradle of the black race of Oceania. We know but little about the interior of that vast island. The Dyaks, a lighter and more civilized race, living on the coast, are terrible enemies of their ruder and darker neighbours of the interior, toward whom they apply epithets to express their contempt and dislike, and whom they treat as wild beasts when captured. Mr. Dalton has this notice of some of these wild men: "Further toward the north are to be found men living absolutely in a state of nature, so called, who neither cultivate the ground nor live in tents; who neither eat rice nor

salt, and who do not associate with each other, but rove about some woods like wild beasts." They were, in short, as savage as the tree-climbers seen by the Dutch in New Guinea. Mr. Earl has a remarkable account of some tumuli, containing small earthen jars, found in Borneo west. The Dyaks cherish these memorials of the past so highly as to refuse five hundred pounds for one jar, saying that they had belonged to their deceased ancestors.

Sumatra, esteemed by some the cradle of the Malay race, still possesses some tribes of Blacks—the true Aborigines. The Googqos are one race there. Mr. Marsden has much information about those natives of the hills and forests. In Java no remains of the Blacks are found. A numerous and civilized people of the Buddhist faith have, doubtless, extirpated the others. In the Moluccas are the aboriginal crisp-haired Haraforas or Alfouras. Stavorinus considers the Alfouras the aborigines of the Moluccas. In the Celebes are wild tribes called the Biajus, like the Kayans of East Borneo. "The Timorian," says Mr. Logan, "may be nearly as distinct ethnologically from the Monguls as the British islanders are." Some in Flores, and also in Buru, have the curly hair. Stone axes of the Aborigines have been discovered in Java, though the people are lost. Woolly-haired Papuans are still in an island east of Java. Mr. Müller denies any dark blood in Timor, as Mr. Latham does of any in the Moluccas. Ceram has a people living in the forests, who are described as cannibals, and are hunted as wild beasts by the other and more advanced inhabitants. The Andamaners are a small, black, and barbarous people, wholly separate from others, though surrounded by nations that have inherited a civilization distinguished for refinement. Mr. Earl said they "very closely corresponded" with the Tasmanians in their "habits and appearance." On the Nicobar Great Isle a tribe has been spoken of, dwelling in the privacy of the dense forest, subsisting upon snakes, roots, and berries, who are black savages, having crisp curly hair.

In the Philippine Isles, especially on Luzon, the Ajetas, or little untameable, prognathous Negroes, as they are called, have been observed to the number of nearly thirty thousand. On the neighbouring Mindanao they live peaceably with the brown Manguianes, who are equally with themselves persecuted by

the Mahometan piratical Malays. On Sooloo they have been partially civilized. The Ayetas, or Aigtas, wander naked over the mountains, and have the true frizzled hair. The Abbate Bernando de la Fuente has a notice of these Ayetas, or Etas, which may be correctly enough applied to the uncivilized Tasmanians. "The said race of Negroes," says he, "seem to bear upon themselves the malediction of Heaven, for they live in the woods and mountains like beasts, in separate families, and wander about supporting themselves by the fruits which the earth spontaneously offers to them. It has not come to my knowledge that a family of true Negroes ever took up their abode in a village. If the Mahometan inhabitants make slaves of them, they rather submit to be beaten to death than undergo any bodily fatigue; and it is impossible by force or persuasion to bring them to labour. I could never reclaim any of them. I believe very few Negroes have been converted. I have ever maintained with these Negroes a gentle and friendly intercourse, hoping that the grace of the Lord might fructify in their hearts." Worthy old priest! Would that all your ecclesiastical brethren of the Christian faith had shown as much feeling for the dark skins of the East!

Japan itself is not without a remnant of the ancient people. The wild men in the north of Niphon were conquered by the Mikado dynasty. The Japanese authors describe them as having stone celts, like our black fellows, and as being related to the hairy men of Jesso, or the Aino race there and in the southern Kurile Isles. Concerning the Ainos the Japanese have a story of a woman, dwelling by herself on a certain island, who was visited by a dog, and thus gave birth to the ancestors of the wild men. On the island of Formosa similar Autochthones, or *men of the soil*, are known with frizzly hair.

A remarkable account is given of a supposed Papuan race on Pouynipet, one of the Caroline Isles of the North Pacific. There the voyagers found huge, rough walls of masonry, remains of some fortifications of a civilized and extinct people. A few Aborigines are there, and have been thus described by Captain Lütké: "The Pouynipetes have a large and flat face, broad and depressed nose, thick lips, large, flashing eyes, expressing defiance and ferocity; the colour of the skin of these turbulent men is a shade between chestnut and olive. Their dress consists

of a short apron, made of grass, bark, or dried leaf of banana, which, attached to their belt, hang down to the thigh." This may be presumed to be rather Turanian than Papuan.

On the island of Vanikoro, where the expedition of Captain D'Urville found relics of La Pérouse, shipwrecked there in 1789, a black race are mentioned, grievously affected by elephantiasis, having a lateral compression of the temple from the arching protuberance of the middle part of the forehead. D'Urville said of them: "Their hair is crisp, but although not cut, it never becomes bushed and massive. They are nearly naked." Here there is the Tasmanian head, and not the Fijian. The worthy French voyager La Pérouse had made accurate observations upon the black races in the isles we have already described, saying: "I am convinced that the race of woolly-haired men, still found in the interior parts of the islands of Luconia and Formosa, were the aborigines of the Philippine Isles, Formosa, New Guinea, New Britain, the New Hebrides, Friendly Isles, &c., in the Southern Hemisphere, and of the Carolines, Ladrones, and Sandwich in the Northern. These two very distinct races appeared striking to our eyes at the Navigator Isles."

The New Caledonians—now under the "protection" of the French, and no more to be tamed by them than were the Tasmanians by ourselves—have been described by some as the source of the Van Diemen's Land natives. But there are several manifestations of progress among them—the result, probably, of contact with the superior brown race of Polynesia—that distinguish them from the other order of Aborigines. But physical differences, in spite of woolly hair, mark their not being a pure race. Labillardière, in 1792, was the first to recognise the similarity. "Their hair is woolly," he tells us, "their persons of middle size, and their complexion as black as that of the natives of Van Diemen's Land, and the general type of their countenance is similar to that of the people last mentioned." M. Domény de Rienzi, in his "Océanie" of 1835, referring to a heathen people, speaks of them as being "Papuan by origin, but the last variety of that race, as those of Mallicollo and of New Caledonia. Perhaps they are a variety resulting from the mixture of Papuans with the Australians." As they manufacture a sort of cloth, make pottery, play instruments of music, indulge (though very little) in agriculture, appear as orators, and

worship their ancestors, they have stepped a long way ahead of other Papuans. The best authority, on the whole, is Dr. Victor de Rochas, whose little work upon New Caledonia contains much sensible matter. He decides that the people are a mixed race. "It would be," he observes, "a frivolous thing, in my opinion, to wish to resolve the question of the origin of the New Caledonians by the sole analogy of customs, beliefs, and institutions." Then he further adds: "The question ought to be sought principally in the pure anthropological characters, and in the language."

Alfred Jacobs, another French writer, has no flattering account to give. "Their physiognomy," he writes, "is brutal and gross. The women above all, with their woolly hair, their stupid countenances, their hanging breasts, their deformed extremities, resemble beasts more than human beings. The men are entirely naked, excepting that they envelope the sexual parts in a shred of cloth; as to the females, they cover the middle of their bodies with a girdle a foot in size, to which is attached behind a garment which descends from the shoulders to the calf of the leg. There is, in fact, in New Caledonia a mixture of the abject Aborigines of Australia and the fine races of Polynesia."

Having traced the Aborigines through the islands, let us review the question of their appearance on the main continent of Asia, always bearing in mind the effect of partial contact with other and more civilized races, which has influenced their *physique* as well as their customs. In proportion to their means of preserving their identity, so do we find the distinctiveness of a native and original people.

Ultra-India, especially in Cochin-China, affords one home for the wild men. As early as 1778 Mr. Chapman described the Moys as black and resembling Caffres in features. They are recognised by various names, according to place; as, the Kardars, Maliyars, Vaisharvers, Kannikarens, &c. The Kardahs or Kardars are a short race, with thick lips, and a deep black skin; being very unlike the yellow Cochin-Chinese. There are Bannars, Cedans, Halangs, Reungao, Thiâmes, and Giaraie between Annam, Laos, and Cambodia, who are more advanced, as some work in iron. Most employ circumcision, though without any notion of a future state. The Niadis are spoken of as very degraded. The Mulchers, or *outcasts*, are small in stature,

active, able to sustain great fatigue, wild, and indolent; but, says Captain Fryer, "gentle to their wives and children, and faithful to their conjugal vows." In this respect they are morally superior to their civilized neighbours. Professor Huxley was much interested in some photographs of these people, brought home by Captain Fryer, and pronounced a striking resemblance to exist between that race and the Australians. The Moi are to the westward. The so-called Red Kariens are in the high mountains north-east of Pegu up to lat. 24° S. Their lighter colour may be the effect of great elevation. The Khyen, or children of the mountains, are to the west of the Irrawaddy, between Ava and Arracan. The barbarous Nagas are in the woody hills of Assam. The Palaum, or Plau, are in the forests north-east of Pegu, between 19° and 22°. The Kakyen, a wild race, live in the hilly territory of the Saluaen, where that stream leaves the Chinese territory. The nearly naked Stiens, between Cochin-China and Cambodia, are the *men of the heights.* They are found as far as 103° E. and in Laos. Unlike the smooth yellow race of the land, they are well bearded, and have thick eyebrows and fine foreheads. According to the French naturalist, M. Mouhot, who perished in the swamps of Cambodia, the Stiens, though savages, are a noble-looking people; and, though without priests or temples, possess more virtues than the enlightened Annamese or Siamese.

The Chinese are not a homogeneous nation, being of various and very opposite races. By common consent they are esteemed the most ancient people now living in a civilized condition, being allowed to have been a nation with a settled government for four thousand years. Bunsen, referring to their language, says, "The Chinese may be called the monument of antediluvial speech." The southern people around Canton, &c., were annexed in comparatively modern days. But the most ancient annals record the existence of other and uncivilized tribes, dwelling in comparatively inaccessible places to the westward. Going by the general name most frequently of Miau-tze (children of the soil), they are known by the several appellations of Sifan, Lolos, &c., though eighty-two tribes have been registered. In the history of the dynasty of the Mings there is a description of the country of Tsiampa, containing this passage: "Some men dwell there in caverns and hollows. They live on fruits, fish,

and crabs; they have neither houses, huts, wells, nor fireplaces." They have no religion. They are like the wild men of Japan, called the Suzuga-yama, having black, crisp hair. These are found in the island of Hainan as well as the hills of Nanling and Meiling of South China, says Mr. Lockhart. Women have far more liberty with them than with the civilized Chinese.

The Malaya peninsula, the most rugged and impracticable country of Southern Asia, has been able to preserve, perhaps, a larger number of wild tribes than are to be found elsewhere, in spite of the energy and cruelty of the Malays who have settled on the harbours of its coasts, and who have to a small extent made some use of the Aborigines. The Jakuns of Malaya resemble the Battas of Sumatra and Semangs of Kedah. The Rev. P. Favre of Malacca has written of them. Their hair, though black and frizzled, has not the crispness of the Kaffir's. The Semangs, or the Orang Binua, *men of the soil*, true Autochthones, were seldom seen by the civilized. Their eyes are deeply set, and the nose sinks at the root. Père Bourien speaks of the Orang-utan, or men of the forest, and Orang-bukit, the men of the mountains. They eat anything, have frizzled hair, yield a strong smell, and tell the truth.

A writer has expressed the wild freedom of the Malayans in these words: "Where the meranti trees join their lofty branches, where the kompas links its roots, there we love to sojourn. We wish to repose with our head pillowed on the knotted trunk of the durian tree, and curtained by russam leaves." Similarly would the Tasmanians and Australians speak to those who would summon them from their independence in the groves to labour and dependence in cities. Mr. Cameron, F.R.G.S., in his pleasing work on Malaya, thus pictures the Aborigines there: "They are of exceedingly short stature, the men seldom over five feet in height; their bodies and limbs are neatly moulded, but the former appear a little too heavy for the latter. Their heads are small, and the foreheads slightly retreating: the mouth is large, and the lips thick and hanging, almost entirely devoid of nerve; the nose is low in the face, and shows no sign of bridge. Their eyes are small, but well set, and not sunken, and have an honest, open look. The hair is generally woolly." In several of these statements we recognise the Tasmanian. Mr. J. R. Logan says: "The Simang and Anda-manni are the present remnants of a

pre-Himalaic colony, and it is probable that similar Draviro-Australian tribes occupied it, as far as it was inhabited, before the Mon-anam race entered the region."

But it is in India we perceive the most singular illustrations of the existence of a primitive race. There, too, they are found surrounded and influenced by a dominant, superior, and numerous people; who, with their four or five thousands of years' contact, the display of an advanced civilization, and the development of an elaborate religious system, have never been able to alter the simple habits of the Aborigines, nor engraft their faith upon that barren stock. Like as in Ultra-India, Malaya, Luzon, Sumatra, &c., they are hidden in jungles or lost among the heights. They are scattered in their retreats among the Hindoos, like so many islets in the ocean.

At one time it would have been thought as absurd to look for the Tasmanian and Australian kindred in India, as it was for the learned author of the "Hindoo Pantheon" to expect to find in Australia "traces and remains of Sanskrit, and temples and images, and various Hindooisms, evincing, indeed, the existence there, at no very distant period, of a magnificent Hindoo Empire."

The Deccan, the chief home of the dark Aborigines, is geologically cut off from the rest of India. Its vast piles of basalt, deep ravines, and rich earth basins, have nurtured a dense covert of vegetation, and furnished hiding-places for the "men of the soil." It is there, as Mr. Huxley tells us, that we may meet "with a people who are by definition undistinguishable from these Australian races." It is impossible, when contrasting those barbarians of the hills with the cultured Hindoo of the Gangetic valley, to believe with Mr. Crawfurd, that "both the mountaineers and the inhabitants of the open plains and valleys are alike natives of the soil, and of the same race." But it is certainly likely that Dr. Mouat may be correct in dividing the Aborigines of India into two great classes, "almost as far as the Poles asunder."

The non-Aryan people are connected with British history, as some of them formed the most faithful troops of the intrepid Clive. Since the rise of Brahminism they have been cut off as an unclean caste, but under the milder sway of older Buddhism they must have made some advance in civilization. Sir Walter

Elliot informs us that the ancient Sanskrit writers admit traces of pre-existing literature. Mr. Justice Campbell rounds them up in the hilly districts from the west and south borders of Bengal, Behar, and Benares, to the frontiers of the Hyderabad and Madras territories, and from the Eastern Ghâts inland to the civilized portions of the Nagpore territory. Mr. G. Campbell divides them into Kolarian, or northern, and Dravidian, or southern. He places Bhils, Koles, and Santals with the former, and Gonds and Oraons with the latter. As Mr. Buchanan thinks, "the physical type in all the Tamulians tends to oneness."

This is too extensive a subject to be otherwise than most briefly noticed in this chapter. General Briggs gives a list of twenty-eight aboriginal nations in India, and asserts that "there is incontestible proof to the aboriginal race having once occupied every part of India." Some of the localities of these aboriginal peoples may be given. The Bengies are north-west of Bengal; the Tirhus in Tirhut; the Koles in the district of Benares of Kolwan; the Malas in Malpur; the Domes in Domapur; the Bhils in Bhilwara; the Nahars of Mahratta; the Mans in Mandesa; the Mirs in Mirwara; the Gonds in Gondwara. There is no caste, and widows marry; they eat flesh, live a patriarchal life, and the Hindoos are forbidden by their creed to teach them. Most of them lead the life of savages still. Even those somewhat progressive, keeping herds, and attiring themselves, after a fashion, have other blood mingled with that of their forest forefathers. The Bhils of the Nerbudda were once much more numerous than they now appear, having been a terror to the quiet farmers of the plains; but of these Colonel Tod declares: "They are an improvement of the tribe with tails; and are not more civilized than the Esquimaux."

The Koles or Coles are a wide-spread family of the hills; both sexes being regardless of clothing, like the wild Veddahs of Ceylon. The Santals, with the spread nose of the Bhils, and once at war with us, are a sub-Himalayan aboriginal people, as are also the Garrows, who live on muchauns in trees on the banks of the Brahmapootra. The black Doms of Kamaon have crisp hair. The Kuli of Guzerat, and the Jagdal of Beluchistan, are black, and ugly. The Veddahs of Ceylon are counted as brutes by the Kandyans; though not clean, they are truthful.

Who would suppose that Captain Graham's account of the Nahals, in the north-east of the province of Khandesh, could refer to persons living in India, the land of philosophy and refinement when the Greeks ate acorns, and Abram dwelt in Charran? "They exist," writes Captain Graham, "perfectly wild among the mountains, subsisting chiefly on roots, fruits, and berries. They court no intercourse with others, and dwell in the unrestrained freedom and hardship of an utter savage existence. Marriage contracts, as well as all other religious ceremonies, are utterly dispensed with, and the assorted pair are free to live together whilst they choose, and separate at pleasure and convenience; the infant accompanies her mother to her next abode, but the grown-up children remain with their father. The Nahals are dark and diminutive in stature, and their features are exceedingly ill-favoured." Thus are they associated strikingly with the Andamaners of the Bay of Bengal, and the Tasmanians so many thousands of miles away. The Poliars, or wild men of the woods of the Varragherry hills, have no huts, but wander perpetually. The naked mothers carry their children on their hips through the Bush, and fly at the sight of a Hindoo. Surrounded by a people, the Hindoos, more fastidious than others in the mode of eating and character of food, these wild men, like the Sairea of the plateau of Central India, will eat anything but cats and dogs. The Dravidian or aboriginal Tamul people of Southern India are, in their speech, singularly allied to Finnish. The Khonds of the Indian Gawil hills have the same *physique*, usages, habits, and even dialects, as the ancient aboriginal Benuas of Malaya.

It is of such people that Mr. G. Campbell's experience induced him to affirm: "These tribes are rather allied to Southern Blacks than to Northern Mongolians." He adds: "Many of the tribes are in the lowest stage of barbarism." The whole of them still muster two or three millions in India. Their customs of boring the septum of the nostrils, leaving their villages upon a death occurring, doubling up the body in burial, &c., identify them still with the southern races. The horse, we are told, was unknown to them. One who knew them well marks one great difference from the Hindoo in their hair, which he calls "very abundant and tangled, of a shock-headed appearance, sometimes curly, and even woolly." Colonel Dalton has written, "The

Oraons have more of the African type of feature, and I have seen amongst them woolly heads." The Chemars of Malabar are often seen woolly; that is, they present the Tasmanian rather than the mere Australian characteristics. There are traditions in South India of other people having woolly hair. An old manuscript account of a Hindoo settlement says: "Anciently men wearing tufted hair dwelt in this town." It is remarkable, too, that the so-called negro range should be greater on the Asianesian than the African side of the Indian Ocean.

In closing the remarks upon these black people, the words of Mr. G. E. Roberts come with much appropriateness: "The Hill-tribes of India, the Veddahs of Ceylon, and the various men of the soil who live in the mountain fastnesses of the Malayan peninsula, are so many stagnant patches of human life, huddling together in the midst of active races, and holding fast by a few degrading traditions." Their connexion with the southern people has been unpleasantly put by M. Alfred Maury. He says: "We can recognise the rest of these Australian negroes in the very savage tribes of Hindustan, with black skins, and having all the ugliness of apes. The most hideous of these Indo-Australian populations inhabit between Palmow, Sumbhulpoure, and the sources of the Nerbudda." He adds further: "One finds elsewhere upon the coast of Mozambique Negroes who recall the Oceanic Blacks." No flattering picture of the Tasmanians!

The African connexion of our Tasmanians has been maintained by Professor Huxley, who thinks them even relations of the Egyptians. Professor Paul Broca has objected to this classification of the abject and most imperfect race of the South with the great builders by the Nile. No one, however, can fail to discover on the monuments of Egypt faces so like the New Hollander and Diemenese, as to warrant Mr. Huxley and others expressing an opinion of old identity. Ptolemy, in his map of the country east of the Golden Chersonesus of Malaya, has a country of the negro fish-eaters, and joins Asia to Africa in lat. 15° S., his latitude for the source of the Nile.

The Hottentots have so many points in common with the Tasmanians—in their customs as well as *physique*—that, apart from the arguments of the naturalist, one cannot but see some alliance. Brayley saw the "strong resemblance, as well mental

as physical, which the lowest of the Papuan race, in intelligence and in the scale of humanity in general, bear to the Hottentots." Barrow, the South African traveller, identified the Hottentots with the ancient Egyptians. The Mozambique people are Papuan-like, with cicatrized bodies.

A connecting link between India and Africa is furnished in some tribes westward by the Indian Ocean. A remarkable race, called the Akhdam, or slaves, became first known to Europeans in 1850. They were living to the south of Arabia, and were held by the Arabs as unclean and uncivilized. Their colour and customs assimilated to those of the littoral Abyssinians, with whom they were doubtless one people before the dreadful flood took place, still perpetuated in the name of the Strait of Babel-mandeb, or Gate of Tears, which divided the family. They are evidently the remains of the old Cushite or Himyaritic stock. The Cushites, who once spread even from the Mediterranean to India, were Ethiopians. Mr. Palgrave, when in Arabia, found a link between the Arab and the Abyssinian in the Kahtanic tribe. He regarded the Himyarites as of African origin. The Chaldeans were undoubtedly Hamitic. The early archaic is common to Asia and Africa. Mr. Logan was of opinion that "the Indo-African preceded the later East-Asian, which developed the Malayan-Polynesian tribes." He thought "the whole western margin of the Indian oceanic basin, from the Red Sea to Kaffir-land, gave words and customs to the Eastern islands." In fact, so strongly was he impressed with this idea, as to declare, "We must go to Australia and Papuanesia to understand the character of the Indo-African era of the archipelago."

Madagascar presents another field of inquiry. Beside the floral evidence, ethnology indicates the presence of a race belonging to the old Papuan type, and doubtless left stranded on the island when the old southern continent was submerged.

From Drury's narrative, published in 1728, we read of the Virzimbers of Madagascar, "of a different species, as it were, from the rest of mankind, and of a language peculiar to themselves." They were, like the Papuans, often "spotted like lepers with dry scabs." They paid "an awful regard to the new moon." They continually shifted their habitations. The shipwrecked sailor thought them "the first inhabitants of the land." The preface to this old book says: "The Virzimbers, indeed, by their

woolly-heads, must come from the more southern part of Africa." Mr. Ellis describes the western race of the island, the Sakalavas, as having their hair "crisp but not woolly." The Betsimisaraks, on the east, are said to have flat noses, woolly hair, and no religion. Mr. Logan refers to their antiquity, saying: "It is probable that the human history of Madagascar numbers many thousands of years."

Two difficulties arose in the minds of the Madagascar authorities. Copland was puzzled to account for certain old-fashioned customs, as circumcision, among the people, when these were then without ships. "But this difficulty," said he, "will vanish when it is considered that the ark was in existence in Ham's time, and for many years after, and consequently his children had a model to work by." Drury, in his simplicity, was puzzled about such black folks being there, and asks: "If none but Noah with his sons and daughters were saved, pray was Noah a white or a black man?"

And yet the Black was no unimportant element of ancient civilization, and is recognised in places where he was never expected to be seen. Not only is the Hindoo god Vishnu black, but the god Batta has woolly hair! This much surprised the philosopher Bailly, who remarked: "No Black of Asia, however, has hair of the same kind. From this I infer that he was a stranger." Some would add, "and a civilizer." The Thoth of Egypt was the Batta of India. Kempfer writes: "Amida, or the Xaca of the Japanese, the Fo of the Chinese, the Batta of the Indians, the Badham of the island of Ceylon, the Sammona-Rodam of Siam, and the Sommonarhutana of Pegu, are one and the same personage." The thick lip, flat nose, and broad face of the figures in the old caves of India point to an African type. Buddha is seen with black ringlets, like a Tasmanian. Sir W. Jones even affirms that the black race once ruled over Asia. It is equally remarkable that the most ancient images of Christians should bear a similar type. Not only have we black Virgins in Italy, &c., but the black Bambinos have sometimes quite a negro face. Memnon has the same. Bryant's "Antient Mythology" says: "Though the Indians seem in general to have had straight hair, yet their deities are often described as very woolly." Then it is added: "Those who imported this notion, and framed these figures, copied their own complexion, and the complexion of their

ancestors." Karl Vogt observed lately: "Our civilization came not from Asia, but from Africa; and Haer has proved that the cultivated plants in the Swiss lake-villages are of African, and to a great extent of Egyptian origin." After all, Bailly may be right in saying "the people of Asia were depositaries and not inventors."

Were there space, it would be a temptation to show that Eastern Asia and the contiguous islands, together with Australia, were not the only places exhibiting the landmarks of an aboriginal period. Apart from the very interesting revelations of American antiquarians, and the explorations of European *savans*, there are in the midst of our existing civilization two living Allophyllan races, identified with a mysterious past of Europe, long before the advent of Celt and Saxon. These are the Finns of the North and the Basques of Biscayan Spain. In Esthonia, the Wales of Russia, may still be seen a broad-faced, short, dull race, having little intercourse with Russians, and, though converted to Christianity by a bloody baptism, still burying their dead in unconsecrated ground. The rudest Finns are said to be the Vatlanders, and the Ingrians are next to them in antiquity. The Finns are marsh-dwellers. They are allied to the Vogels of Perm, the Ostiaks and Samoiyedes of Siberia, and the Ugrians, or ugly ogres of mediæval story. There are the Finns proper in Finland, the Esths of Esthonia, the Livs of Livonia (5,000 in number), the Laps of Lapland. The Czechs of Bohemia, and the Magyars of Hungary, are connected with this aboriginal people, who may have entered Europe from the Altai mountains. Their languages belong to one family.

The Basques, or Euskaldunes, have remained a distinct people, in spite of Carthaginians, Romans, and Goths. Their language is unique, "having," says William Von Humboldt, "a building character, something agglutinate like the American, with ten cases of nouns, and some apparently paradoxical peculiarities of grammatical construction." So peculiar a tongue led M. Ponceau to exclaim: "With the bones of the mammoth, and the relics of unknown races which have perished, it remains a monument of the destruction produced by a succession of ages."

Beautifully did Dr. Hooker say, at an opening of the British Association: "Every fresh discovery concerning prehistoric man is as a pier built on some ground its tide has exposed, and from

these piers will one day spring arches that will carry him further over its depths."

Although the subject has been more than once hinted at, yet the citation of a few authorities on the connexion between language and origin may not be out of place, and might be interesting to some readers.

As Professor Max Müller says: "Language is our Rubicon, and no brute will dare cross it." The inquiry, therefore, into language will never be unprofitable. Mr. Logan, the Oriental scholar, exhorts us to remember that, "to form an approximation of the real connexion of two races, the entire ethnic (including the linguistic) affinities of each with other races must be first studied." He gives a wise caution in remarking: "Ethnology is an attempt to recover lost history, and language is only one of the records which it uses. It is from confounding philology with ethnology that the German philologists have pushed their science far beyond its legitimate bounds."

Mr. Pritchard, in his work on Man, observes that "Glottology, or the history of languages, founded on an accurate analysis of their relations, is almost a new field of inquiry." As such it should not be thrust forward too prematurely or hastily. Prof Max Müller, the prince of modern comparative philologists, is enthusiastic in his pursuit, and declares, "The evidence of language is irrefragable, and it is the only evidence worth listening to, with regard to ante-historical periods." Horne Tooke takes similar high ground, when asserting, "Language cannot lie, and from the language of every nation we may with certainty collect its origin." The Nestor of philosophers, Humboldt, preaches more moderation: "Neither the analogy nor the diversity of language," he says, "can suffice to solve the great problem of the filiation of nations. They afford only simple probabilities."

The subject of the family relation of obscure languages of savages is neither trivial nor unnecessary. Max Müller is able to write: "Dialects which have never produced any literature are as important—nay, for the solution of some of our problems (in comparative philology), more important—than the poetry of Homer, or the prose of Cicero."

Bishop Watson made this prediction: "The time will come when the mother-language of all the various dialects spoken in

these islands will be discovered in some part of Asia." Sir Stamford Raffles was led from his Indian isles' experience to remark that "one original language seems, in a very remote period, to have pervaded the whole Archipelago, and to have spread toward Madagascar on the one side, and to the islands of the South Seas on the other." A step was gained when Mr. W. W. Hunter could say that the Indian aborigines and the Chinese "obtained from a common source terms for common objects, and for the civil institutions of a primitive race." As has been remarked in the chapter on "Language," the passage of the tonic into the harmonic, the monosyllabic into the polysyllabic, may be esteemed a natural one. The Chinese has preserved its integrity beyond any other tongue in the world, but cannot be regarded, with all its monosyllabic forms, as the parent. The obstacle in our path of comparative philology is thus pointed out by the learned Mr. Wake, F.A.S.L.: "The reason why these ethnic lines do not meet is because the common centre from which they originated has been destroyed."

As common ethnology so distinctly traces the connexion between the Indian aborigines and the Australians with Tasmanians, so does philology establish their kindred. Our distinguished Oriental scholar, Dr. Rost, assures us, as "an undeniable fact, that the grammatical skeleton of the Australian, Mongolian, and South Indian languages is essentially the same, and is not only distinct from the Sanskrit type, but from that of the Malay, Polynesian, Indo-Chinese, and sub-Himalayan tongues." Mr. W. W. Hunter says: "The aboriginal races of the Eastern peninsula, Burmah, and India north of the Vindhya range, derived their speech from a source common to themselves and the Chinese." He regards "the whole nomenclature of the Helot caste among the mixed Hindoos, both in ancient and modern times," as being "derived from the aborigines." This philological argument is held to show the antiquity of the Black people. The Rev. L. E. Threlkeld saw some curious analogy with the Chinese, and said: "This coincidence with the Australian dialect, wherein single letters, which are but signs, symbols, or characters, are roots having a specific meaning, shows clearly that the language of the Aborigines here is, like the Chinese, of a most ancient date."

Mr. Protector Moorhouse, of Adelaide, a believer in the Indian

origin or connexion of the Australian Blacks, was so impressed with the singular agreement of the first and second persons in the pronouns, and the total dissimilarity of the third persons in the various dialects, that he ventured upon a fanciful theory to account for the same.

"All this appears," said he, "to throw light upon the manner in which these people began to spread over the continent. As the pronouns of the first and second persons are expressed by the same words, and these are invariably dual forms, one is led to infer that they separated in pairs; and these words, being in daily use, have been retained. The third persons almost all differ; and it appears that, as children were born, terms for the third person had to be invented. They retained the general principles of the language, as proved in the points of agreement."

Mr. J. R. Logan, of Singapore, author of "Languages of the Indian Archipelago," has written some valuable tracts upon the subject of the connexion of the Black people of the islands with the Black race of India. His views are so luminously expressed, and are the result of such experienced thought and extensive research, that the English reader might be pleased with a fuller account of them. I had the good fortune to make my first acquaintance with the yellow leaves and imperfect printing of these very valuable tracts through the presentation of a copy by an Indian visitor to the noble Public Library of Melbourne.

Founding his theory of connexion on philological grounds, he had the advantage of residence at the great depôt of the East, the rendezvous of many native peoples—the equator island of Singapore. With India and Ultra-India on one side, and Australia and Melanesia on the other, he gathered around him in that forest-girt port the representatives of a large number of Asiatic islands. This was the secret of his interest in ethnological studies.

The main principle he seeks to elucidate is this: "The basin of the Ganges and a large portion of Ultra-India were occupied by tribes akin to the Malaya-Polynesian before the movement of the Aryan or Indo-Germanic race into India." The Sanskrit is the oldest known language of the family to which the Zend of Persia, the Greek, Latin, Russian, Gothic, and Celtic tongues belong. "But," says Mr. Logan, "the oldest races of India,

Ultra-India, and Asianesia were of a variable African type, the two principal forms being Australo-Tamulian or quasi-Semitic and Negrito, followed in Asianesia by the Malagasi." Elsewhere he writes: "At the beginning of the first Asianesian era, India (with the exception perhaps of the Gangetic basin, or the alpine portion of it), with the lower basins and western shores and islands of Ultra-India, were peopled by tribes of the Negro type, who spoke languages allied to the African."

Distinguishing some of the races already described here, he observes: "The aboriginal Indian tribes, with the exception of the Turanian, Rajmahali, Khond, Kol, and Gond, appear to be intermediate between the Iranian and Turanian, but much nearer the former, with a strong resemblance to many African tribes." "The Dom, Kowat, and Bhil have much of the Negro, Indo-African, or Melanesian character, which may be largely traced in Southern India." With the last-mentioned our Tasmanians are most nearly to be identified. Mr. Logan distinguishes these true Papuan people, to whom those of Tasmania are related, from others like the continental New Hollanders. He proceeds, after mentioning that the Indo-Semitic, or Tuda, have massive heads, large eyes, and receding foreheads: "The spiral-haired Papuan tribes of South New Guinea and Torres Strait being often more Africo-Semitic and South Indian in their physiognomy than the Australians, while the latter have the fine hair of the South Indians and some allied African nations, and a linguistic formation which resembles the South Indian more than any other in the world."

Mr. Logan remarks: "In some places Tamil books record that the original inhabitants (of India) had *tufted hair*, and some of their customs were African-Papuan. The Black Doms of Kumaon have still hair *inclining to wool*." This is most valuable confirmation of the argument that the Tasmanians and these Indian tribes belong to one and the same race.

He has many references to these Negro developments in Ancient India, speaking of the time "when the Indian Ocean had Negro tribes along its northern as well as its eastern and western shores." No one need be surprised, therefore, to notice such a sentence as the following: "The pre-Aryan civilization of Southern India had a partially *Egyptian character*." At the same time he brings forth the interesting fact that "for several

thousands of years Negro and Non-negro lines have run parallel to each other from the Andamans and Nicobars to Polynesia, on the one side, and to Formosa, and especially to Japan, on the other." He found it "not improbable that the first Turanian tribes, who extricated themselves from the alpine land, and descended into the outer basins, found Negro tribes scattered over a large part of the shores of South-east Asia."

Again, referring to the Dravirian or South Indian people, he writes: "In pre-Aryan India the Africo-Semitic physical element must be the most ancient, because it is chiefly marked in some of the most southerly tribes, and is found also in Australia and amongst the Papuans." Mr. Logan adds: "Between the Australian condition and the proper Dravirian, or that which immediately preceded the Aryan, the interval, whether measured by physical, linguistic, or mental and industrial change, is very great."

Elsewhere introducing the Simangs of Annam, a race allied with the Tasmanian, he says, "Some of whom are Australo-Tamulian in appearance, while others differ little, save in their frizzled and spiral hair and dark complexion, from some of the adjacent Binua." "The more exposed hordes are black. The hair is spiral, not woolly, and grows thickly on the head in tufts."

After showing that a great southern movement of the Chino-Tibetan race "gave a Malaya-Polynesian population to Asonesia," he informs us that "the ethnic distance between the Polynesians and the Javans or the Mons, and the mere language and geographical position of the former, attest the great antiquity of the period when the Ultra-Indian tribes began to settle in Indonesia."

"The Draviro-Australian phonology," according to Mr. Logan, "is archaic Scythico-African, and not proper Scythian, Semitic, Iranian, or Caucasian;" and he thinks that it is probable the Libyan races and languages long preceded the Draviro-Australian in South-western Asia. He continues the subject thus: "The Egyptian stage of the Semetico-Libyan formation is cruder than the Australian stage of Draviro-Australian. It is nearer the Tibeto-Ultraindian and Chinese developments. Australia has much of the advanced proto-Scythic development which predominates in the American, the Zimbian (South African), and.

the Euskarian (Basque) formations, and is only less prominent or more modified in the Indo-European, Scythian, Caucasian." The Dravirian languages are those of the Tamul, Teluga, Teluva, Malayâlma, and the Canarese.

Vast as is the antiquity of the Aryan race that migrated to the fertile valley of the Ganges, Mr. Logan is impressed with the great period of time between their arrival and that epoch of Australian migration, saying: "From the Australian era of Indian ethnology to that which immediately preceded the advance of the Aryan race beyond the Indus there must have been a great lapse of time. Of this we have some measures in the changes which had taken place in the Indo-Australian region." Then he goes on to unfold a great antiquity, and make a most extraordinary announcement, in these words: "In Asonesia the Papuan race and formation had spread over the islands, obliterating or modifying the ancient tribes and language."

Another quotation must be given from this interesting writer, though some valuable matter from his works is introduced into the chapter on the Language of the Tasmanians. The Malaya-Polynesian languages he describes as "soft, highly vocalic, harmonic, and consequently dissyllabic." They would therefore afford a striking contrast to the languages of South-eastern Asia. He proceeds with this philological statement:

"In the great circuit from Sumatra to the Liu-Kiu Islands, the continental languages are throughout monosyllabic, and strongly intonated. When we pass to the islands in front of them, this character is entirely lost, and another kind of uniformity takes place. But when we extend our observations beyond this circuit to the north, east, and north-west, we find that the peculiar phonetic character of the insular languages spreads at both ends into the continent, meets in the interior behind the monosyllabic region, occupying the greater part of the Middle and Northern Asia, and may be followed into Europe, Africa, and America. The *tonic* thus forms a compact group entirely surrounded by *harmonic* languages."

Then comes a passage uniting the fragmentary history of the whole, and reaching at one bound from the Himalayas of India in the north to Tasmania in the far distant south-east:

"The Chinese-like tribes of Ultra-India appear to have in-

truded into an ancient harmonic formation that extended from the Himalayas to Tasmania, and it is more probable that their languages were partially influenced by the native ones than that, on their first emergence from the western highlands of China, they differed from the Western Chinese language, as they now do."

He establishes the relation of the Indian aborigines with others thus: "It may then generally be said that, both in *physique* and in the construction of their language, the Aborigines present a type analogous to that of the Negritos of the Papuans, Tasmanians, and others, as well as to the nearer Negritos of Malacca and the Andamaners."

Will Geology help us to an explanation of the Origin? The authority of the great Humboldt comes to the rescue. "The distribution of organic beings on the globe," says he, "depends not only on very complicated climatic circumstances, but also on geological causes with which we are entirely unacquainted."

Ethnologists can trace the westward progress of ancient peoples, as naturalists mark the migration of the brown rat from Persia into Europe. Some of the latter may have been carried in ships from the East, but the great swarming came overland. A great earthquake is said to have been the disturbing cause of their voluntary exile. They may have been thrust onward by invaders to the rear, or impelled by hunger to seek other and happier feeding-grounds. Great rivers would not stay them. Pallas, when in Southern Russia, saw them cross the Volga near its mouth a hundred years ago. Similarly do historians indicate the progress of the Asiatic barbarians, many of whom, when crossing the Volga, perished like myriads of rats in its turbid waters.

But however satisfactory this may be to explain the presence of the Celt in the oak forests of England, on the heather hills of Scotland, in the bogs of Ireland, and in the sunny vales of France, we cannot so easily connect the Tasmanians with the Negritos of Luzon, the New Caledonians with the Andamaners, and all with the dark race of Southern India, or even Eastern Africa. Could we pass them onward by the monsoons or trade winds, in good ships, provided with food for the voyage, our difficulties would diminish; but, without these valuable aids to

migration, we are puzzled with so many *island foci* of the Black people.

"How should the Tasmanian get there but by his canoe?" said travellers. It is true that his wretched catamaran gave little appearance of a voyage. Mr. Logan alludes to the poor maritime skill of the whole of Papuanesia, even when surrounded by Malays and Polynesians, with their elegant style of naval architecture. The Australians, with their bark rafts, or floating logs, seem ill capable of venturing upon a migratory tour. The Rev. Dr. Lang, an able and worthy colonist, could not bring the Papuan in any other route by which "the numerous and remote lands, of which he has unquestionably formed the aboriginal population, could ever have been reached by his race." He therefore assumes that "the abject and degraded savage is evidently the descendant of the comparatively civilized, as well as bold, intrepid navigator of a long bygone age." It is not difficult to speak of "a few helpless individuals, who had in all probability been overtaken by an unexpected tempest," founding a settlement in New Holland; but how the Tasmanians could have crossed the boisterous Bass's Straits is not very clear.

If, having lost the sailing art, they were the sons of bold, intrepid navigators, their declension has no historical parallel. Even Dr. Lang could not avoid referring to the "general adoption of the habits and pursuits of a maritime people, which it is natural for islanders to become;" that is, if Malays, Polynesians, Greeks, or Saxons. But, in the case of the Tasmanians, one cannot but exclaim in the language of Mr. Huxley, "I do not believe in the dying out of the knowledge of the art of navigation."

How could the woolly-haired Papuans of Tasmania get so far separated from the woolly-haired Papuans of New Guinea, New Hebrides, &c., while having their cousins of more luxuriant hair occupying the continent of Australia between the two?

According to Professor Quatrefages, currents would have carried the migratory races. But, unfortunately, the currents run the wrong way for our object. They bring the New Caledonian from Samoa, and the Tasmanian from Tahiti. As that hypothesis fails, is it not more rational to suppose that men unacquainted with navigation, and not likely to be drifted in their

rafts to other shores, might have travelled by land across regions now billowed over?

The stories of the Atlantidæ support the theory of an ancient submergence to the west of the Pillars of Hercules. The Mormons picture the chain of islands, which were the departing highlands of the sinking world, along which the Hebrew forefathers of the Indians were said to have found havens of rest on their eventful passage. Such a submergence is conceivable. The depression of Europe but six hundred feet would destroy two-thirds of its landed surface. And yet a comparatively short geological time could effect this.

May it not be that the depression of land is sufficient to account for the isolation of New Guinea, New Zealand, Tasmania, Ceylon, and Madagascar? Professor Huxley has said that the Australoid and Negroid, of his ethnological nomenclature, were in existence when there was land between Australia and the Deccan, and between South Africa, Malaya, and New Guinea on the other.

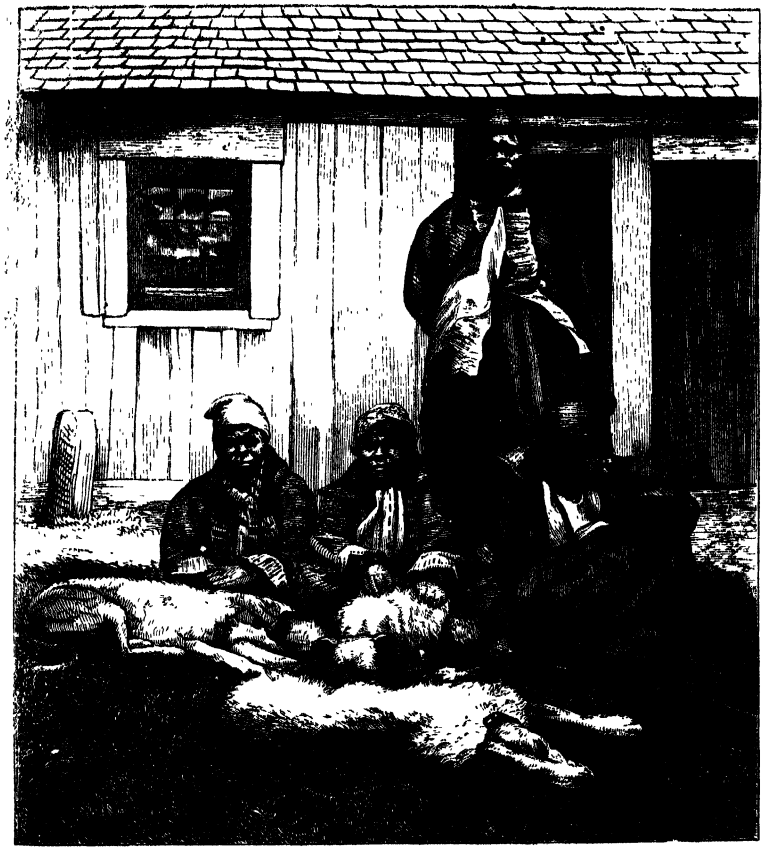
The present condition of ocean depth cannot help us very satisfactorily in our inquiries. Ignorance of the forces at work, and the strength of their action at various epochs, will scarcely permit us conclusively to affirm that a shallow sea near land indicates a more recent depression than a deeper one.

A few soundings in the neighbourhood of Australia may be mentioned. They will, perhaps, lead partially to the settlement of the question of a former continent. The sea is very shallow between the Celebes and Timor, while between the latter and Australia it is but from 30 to 70 fathoms. From Celebes to Borneo, again, we have the soundings about 30, and from Borneo to Java 40. The depth between Lombok and Sumbawa is 65. The deep soundings are suddenly reached; being above 2,000 between Ceylon and Sumatra, above 2,000 in the Arabian Sea, and no bottom at 2,000 to the south of Lombok. But from New Guinea to Australia the water is shallow; being from 25 to 65 toward Port Essington, 30 to Cape Arnhem, and 10 to 20 to Cape York. There would seem to be almost a connexion between Ceylon and Madagascar by means of islands and reefs. The deduction therefore is, that from Ceylon south-westward to Madagascar, and eastward to Australia, we have a fringe of the sunken continent.

The two islands of New Zealand are separated by a strait 40 to 100 in depth, while Foreaux Strait is from 10 to 30. The sea is from 40 to 60 off East Cape, 107 at 100 miles west of Cape Egmont, and 155 south of Preservation Inlet. The greatest depth between New Zealand and Australia is 735. Even as low as the Snares, to the south, it is but 78. The greatest depth between Norfolk Island and Cape Howe of Australia, half way between the two, is 510 fathoms.

Looking at the chart of the bed of the Atlantic Ocean, what do we find? Starting from the west coast of Ireland, we go three hundred miles over a shallow sea, which is in parts not above 100 fathoms deep. Then comes a sudden fall to a depth of 1,750 fathoms. Onward toward the American coast the bed rises and falls in varying undulations, being from 1,300 to 2,400 fathoms, or two miles and a half below the surface. A rapid rise of the bed then takes place. When three-fourths of the way from Ireland to Newfoundland the depth is at its greatest, but changes in three hundred miles from 2,400 to only 200 fathoms deep. Then for some two or three hundred miles further the rock-bed of the ocean continues to be but a hundred or two yards from the surface. In the deepest portion no rock is known, but only the silicious shields of infusorial animalculæ are brought up by the lead, showing it to be now but the peaceful, quiet burial-ground of departed organic life. Yet could we pierce this new deposit, what might we not know of another age? What caves are there, with their bone-breccia floors? What superficial deposits might be found bearing relics of creatures whose types the geologist has not yet discovered! What new light could be thrown not only upon the history of our planet, but the origin of man himself!

Turning then to the Asiatic and Australasian islands, do we exceed the bounds of common reasoning in assuming like geological changes? Is there much difficulty in connecting these isolated fragments of an extended continent? Ceylon is divided by no deep waters from India, and is essentially of similar geological structure. The Andaman Islands, as well as Ceylon, yield such evidence of past volcanic energy, as to give some clue to the cause of separation. Sumatra, running parallel to Malaya, and at little distance from it, has in its palæozoic and golden mountains a striking likeness to the peninsula.



TASMANIAN GROUP AT OYSTER COVE STATION.

(*Photographed by* DR. NIXON, BISHOP OF TASMANIA.)

Eastward rises Java, with its thousand peaks of old basalt, and its crowd of fuming craters. Eastward still we follow the line of volcanic activity, and behold sufficient reason for depressing agency in the region round. Sumbawa has but lately exhibited igneous eruption. Timor, the Philippines, &c. testify to similar convulsions. This may be quite sufficient to account for the changes over so large an area, and within a comparatively recent geological period.

But were we sufficiently informed, we might be able to record distinct evidences of the gradual depression in the very islands themselves. Local circumstances verify the idea to some limited extent, as very ancient monuments are observed below the sea level near the shore. An illustration is given in the island of Banabē, where the ruins of a temple are now partly submerged. A glance at the map would convey the notion of the facility with which, geologically speaking, the various islands could be united, so that one vast continent might reappear.

The South Sea antiquities aid the geological argument for the southern continent. Without going to the basaltic stone fortifications found by La Pérouse, in the island of Puynipet, or stopping at the Cyclopean walls of the Carolines, let us turn to the Malden Island, at present supplying the farmers of Victoria with guano. It is situated in lat. 4° S., long. 155° W. Lord Byron, in 1825, was astonished to behold these temples of wrought stone, raised on vast platforms. At present the spot is but twelve square miles, without soil at all, being simply a guano island. Would not such an architecture presuppose a considerable population, favoured with an advanced civilization? The well-known instance of Easter Island, in its present isolation, tells the same tale. The massive walls, the sculptured images, the new race, all indicate a time when a larger population of another people were connected with other lands. Captain Beechey relates his discovery of platforms of hewn stone in the easternmost parts of Polynesia. Tahiti has its pyramid of square stone, 240 feet long, 90 broad, and 50 high. The present people of the land knew only how to build with bamboos.

The strong associations between the Polynesians and the Americans can thus be accounted for; as also between the last and the Asiatics on the eastern side. The platform pyramids of the South Seas are identified with those ancient edifices of the

plains of Mexico and Peru, and both again with similar ones on the older continent. The huge images on Easter Island, with their prominent noses and red colour, point to quite another and older race.

If, then, there is sufficient evidence to warrant the belief that within the period of man's existence on this globe there was a more or less intimate connexion of large portions of land, where now the South Pacific rolls its ten thousand miles' expanse, may we not assume that within no greater stretch of time parts of New Holland were united to New Guinea, to New Zealand, and to Tasmania?

Without placing the Fuegians in intimate association with the Papuans, though there are most remarkable points of similitude between the two in their physical appearance and daily life, there are not wanting arguments drawn from South America to support the sunken continent theory.

It is singular that while such a parallel can be drawn between the Tasmanians and Fuegians, the Caribs, on the northern side of South America, should exhibit similar affinities, especially in the adornment by cicatrices. They were found so unlike ordinary Indians in their habits, that not a few travellers guessed them to be of South African origin. Admiral Fitzroy discovered in other South American tribes the same family likeness to the Hottentots and Australians. Naturalists have detected many analogies in South American life with Australian forms. One-fourth of the New Zealand flora is common to Australia and South America. Dr. Hooker, finding certain plants common to New Zealand, Tasmania, and South America, supports the idea of the submerged continent by this striking passage:—"The seeds of neither could stand exposure to the salt water, and they were too heavy to be borne in the air"!! They travelled overland, as the various dark peoples had done, and were isolated in their present homes, as the wild tribes have become, by the subsidence of the intervening land. Professor Agassiz, observing the want of delta to the Amazon, because of the inroad of the sea, is induced to speak of "the ancient extension previous to, and partly during, the glacial epoch of the south-western lands of Europe, and contiguous portions of Africa, far into the Atlantic, and toward the American shores, if indeed not continuous at one time with them."

The many points of resemblance noticed between the Tasmanians, on the one hand, and the South Africans—especially the Hottentots and Mozambique Blacks—on the other, have already been mentioned. The islanders were found, also, to have strong affinities with the nearly extinct Virzimbers of Madagascar.

The geological argument will bear on those places. Dr. Hooker spoke of the floral intimacy of New Holland with South Africa, even to the extent of thirty pér cent. of plants. Although the two regions are now so many thousands of miles apart, they were indebted largely to one common source, geographically situated between them, for their existing forms of botanical life.

But Madagascar has an interesting means of identification with Australia and New Zealand, in its former possession of a huge bird. At first the egg was discovered. This was twice the length and breadth of that laid by an ostrich. Subsequently portions of the skeleton were recovered. So large a struthious creature would demand plains of an extent not now to be found in the mountain hold of Madagascar. The island must have greatly extended eastward at no very distant period. The bird doubtless belonged to the now sunken continent, as did the dinornis of New Zealand, and the monster bird whose remains have been so lately disinterred in Queensland of Australia. Marco Polo heard romantic tales of the rukh of Madagascar, as the Maories now have traditions of the departed moa.

The connexion between South Africa and India has been established by a number of animal forms found only in those two parts. The ties once existing between the former and Australia are now fully recognised, while those of the latter and Australia are equally established. The presence of similar plants, and not of animals, is thus referred to by the able Mr. Murray: "The connexion between India and Australia must have been very ancient, and at a time when one or other of them was not in a condition to supply the other with mammals, although it could with plants." As to South Africa and South-west Australia: "The former contiguity of land," says he, "by which these African types found their way to Australia, must have existed before mammals in Africa had appeared there, at all events in any numbers, or it would have contributed them too. The period of connexion must therefore have been very ancient."

But as we find such similarity of floral life, and such ethnological parallels, between South Africa on the one hand, and India on the other, with our Australian colonies, we cannot avoid the identification of them, even though great antiquity be demanded. If the remains of man are perceived with those of even extinct animals in Europe, as in Kent's Cavern, it is surely not too much to assume that the parent race, from whom the Hill-men of India, the Hottentots, and the Tasmanians were once derived, may have dwelt on the earth before the birth of the Bengal tiger or the African elephant.

The late Mr. Jukes spoke of the gradual sinking of the north-east coast of Australia, when accounting for the existence of the Great Barrier Reef, a coral bank twelve hundred miles long. On the northern side, at the great projections of Arnhem Land and York Peninsula, the rocks present the same features above the ocean as the headlands of New Guinea opposite. Here we have the repetition of the cretaceous systems of Calais and Dover divided by the Straits. But in the case of Australia and New Guinea, it is most probably one of submergence, as the sea is shallow between. No sudden convulsion has parted them, as explosive anger often rends the ties of love; but, rather, like the drifting tide of scarcely-to-be-observed mistrust, they have been thus distanced, with the yawning waves of forgetfulness between.

The New Guinea flora and fauna are unmistakeably Australian. Dr. Sclater regards its ornithology as "part of the Australian region." The neighbouring islands to the eastward and south-eastward exhibit the same features of paternity. There are still marsupialia in New Hebrides as well as New Guinea. Dr. Hooker groups the floras of New Hebrides, New Caledonia, New Zealand, and New Holland in one. The flora of Timor is Australian. Dr. Gunther observed a like connexion in the reptiles and batrachians of both parts.

Even beyond to Ceylon and Andaman we detect the alliance. Sir J. E. Tennent writes: "The faunas of Ceylon and of Australasia seem more similar than those of Ceylon and of Hindustan." Mr. Murray connects its fauna with that of Australia. Cingalese traditions refer to a former extension of their country further to the southward. Dr. Owen distinctly avers that "the Andaman Islands, like the Nicobar, Java, Sumatra, and Ceylon, may have

been parts of some former tract of dry land distinct from, and perhaps pre-existent to, that neighbouring and more northern continent." Even in India the four great Australian families of Casuarinæ, Myrtaceæ, Melaleucæ, and Proteaceæ are represented.

If New Zealand were geographically associated with Australia and Tasmania within the human period, have we any evidence of similarity of race in the two regions?

It has been known that through Polynesia dark blood still exists. In the Paumotu group, especially in Bass's Islands, thick lips and crisp hair arrested the attention of voyagers, and led the great naturalist Quatrefages to ask: "The Negro element, chased away from Tahiti, has it been compelled to seek an asylum upon these coral islands?" There is evidence that a dark people dwelt in the Sandwich Isles before the Polynesian Kanakas. During the subsidence of the continent the inhabitants of the Pacific region were not the light-coloured immigrants now spread there.

The Maories of New Zealand belong to the migratory family of Samoans, Tahitians, &c.; and yet travellers, like Dr. Dieffenbach, have remarked the remains of two races on the island, one darker than the other. D'Urville alludes to a black prognathous people there. Captain Crozet declares he saw such a remnant at North Cape. On the sandbar of rivers ashes of native fires have been disinterred, in which were burnt bones of the moa bird. Mr. Tate speaks of the discovery, in a cave on the Waiwo, of rough stone celts, like those used by the Tasmanians, and wholly different from the *meri* of the Maori. Traditions of the inhabitants strengthen the hypothesis; leading Professor Quatrefages to say: "The Natives have various traditions, whence it appears that in the most inaccessible regions, and in the depth of the virgin forests of their isles, savage men still live, whom they declare not to be of their race, and belong to a population anterior to them." Upon the authority of Dr. Hochstetter, he adds: "They name these Aborigines Maero in the northern island, and Ngatimamoe in the southern island."

Maunoir has conjectured the existence of a former people by the discovery, in the southern island, of burial utensils, which entirely differ from those of the Maories. Dr. Gaussin has.

investigated the New Zealand language, and therein detected such a mixture as would confirm the Papuan hypothesis. But, in spite of Mr. Shortland's doubts about the traditional, Sir George Grey has translated the Maori song of Manaia, one of the band of immigrants landing at the river Waitara:—

"He found a people who lived there; they were the original inhabitants of these islands. Manaia and his men killed them, and destroyed them."——"Manaia and his companions destroyed the Aborigines who occupied the country, in order to seize upon it."

Let us then see how New Zealand can be brought more immediately into the Australian family.

In speaking of the connexion of countries, the periods of former unions and separations should be borne in mind. Two countries may have been associated with a third, but at such different ages, as to bear little likeness to each other. Thus it is that New Zealand, though once joined to New Holland, yields a token of similarity quite varied in nature to that exhibited by Tasmania, also once stretching forth to South-eastern Australia. The Australian gum-tree and kangaroo, which are still to be seen in New Guinea and Tasmania, are unknown to the land of the Maories. To explain this anomaly, while setting forth the points of botanical resemblance, otherwise, between New Zealand and Australia, Dr. Hooker is compelled to speak of "going back to epochs when prevalent botanical as well as geographical features of each were widely different from what they are now."

As to relationship, that learned naturalist informs us that, of the natural orders of New Zealand, only three are absent in Australia. The former region is richer than the other in monocotyledonous plants, though no less than 240 out of its 282 genera of flowers are found in the kangaroo districts; and of that number 50 are confined to the two places. Norfolk Island, on the same authority, is esteemed more Australian than New Zealand in flora. Dr. Sclater acknowledges the relationship of the birds of New Zealand and Australia.

Last year, when walking with that venerable and loving-hearted geologist, the Rev. W. B. Clarke, over the coal-measures of New South Wales, he suddenly stopped, and said, "Do you know, I believe this formation extends under the sea as far as

New Zealand? for its coal-field in the southern island is just like ours." In very truth, there is a striking likeness. It is true that vast piles of primary rocks have pierced the carboniferous series; and, after thrusting them on either side, now stand gazing, with their caps of snow and flowing robes of glaciers, at the blue azure above the flashing clouds. But similar crests divide the coal-fields of the Australian continent. Yet, while the carboniferous sandstone dips down beneath the sea of New South Wales, it reappears, as if rising from the billows, on the opposite coast of the Maori land. The very range which breaks the strata into eastern and western fields is as auriferous as the Cordillera of Australia. A thousand miles of waves divide the two. But for how long have they been divided? Who can tell? Dr. Hector, the Otago geologist, believes that the heights which there tower twelve thousand feet were formerly much higher still, judging from the glacial furrows near the sea level now. Before that depression, might not the two lands have been united? And then might not the Papuans have straggled thither? Since that depression the character of New Zealand has changed. The Canterbury Plains, then covered with the fan-like moraines, are now low grass-lands for sheep. May not this have influenced the vegetation, and changed the aspect of nature since the Black people roamed? While some may smile at so imaginative a theory, it is far less wild and improbable than others which have been verified in our own day.

The Chatham Isles, some four hundred miles eastward of New Zealand, and bearing a strongly volcanic character like the latter country itself, when visited by Mr. Broughton in H.M.S. *Chatham* in 1791, were found to possess a New Zealand flora and fauna, and a totally anti-Maori population.

Dieffenbach speaks of the Chatham Islanders having black, glossy hair, and thick heads. He declares that they spoke another language, used quartz-stone knives, had only clubs for weapons, knew nothing of flax-working, had a bottle made of flax-leaf for water-carrying, and formed their canoes of a rough wicker-work of creepers, having the spaces between filled up with the buoyant kelp. They did not have the tattoo, were living in breakwinds for huts, and had a dark skin, small ears, curly and coarse hair, full lips, prominent cheekbones, with a

short, ill-proportioned figure. They were pronounced totally ignorant of God, though believing in atuas or spirits.

A whaler happened to call in at the islands. On board were some Maori seamen. These *civilized* natives were struck with the *Blafello*, as they called them in aboriginal English for Blackfellows. When they got back among their countrymen, they told the story of seeing a number of Tangata Maori, or indigenous men. They spoke of their helplessness, having but stone weapons, and of their admirable personal qualities for a roast, being so fat. It was enough. A vessel was chartered, and a party invaded the new land. The white man's gun overcame the stone club, and ovens were soon full of the delicious food. About 1,500 were alive in 1832; now about 100 only remain, slaves to the Maories, and speaking the language of their conquerors.

A skull of that nearly extinct race has been examined by Mr. Alexander Macalister. He describes it as phænozygous, noticing spaces between the zygomatic arches and the temporal fossæ. It was mecocephalic, or long-headed, and decidedly prognathous. The processes were strong and coarse, though small. He compared measurements with all races. The cephalic index is put at ·714, to the Negro of ·710, the Papuan of ·722, and the Maori of ·712. The greatest length was 7, to the Negro of 6·9; and the breadth 5, to the Negro 4·9. The transverse arch, from mastoid to mastoid, was 14·5, to the Maori 14; and the zygomatic arch, 2·2, while the Papuan is 2·6, and Negro 2. The longitudinal arc from supraorbital ridge was 11·9, to the Negro 12·6, and Maori 15·1. The thickness of the frontal bone was found twice that of the European cranium. Mr. Macalister thus concludes: "The anatomical features of this cranium evidently associate it with those of the Melanesian group—thus bearing out the observations of Dieffenbach and Broughton upon this race, that the affinities of the aboriginal race were most close to the Australian tribes."

The former connexion of Van Diemen's Land with New Holland on the one side, and New Zealand on the other, has been satisfactorily proved by the botanical researches of Dr. Hooker, and by Dr. Mueller, the worthy prince of colonial botanists. The animal kingdom is remarkably identical with that of the opposite shores of Victoria. The older union of the

two is now further established by the finding of the Tasmanian devil and tiger (Dasyurus and Thylacinus), in a partially fossilized state, on the main continent. Geologically, the two opposite coasts, especially to the eastward, are exactly the same. Furthermore, the granite islands of Bass's Straits are but the continuation of the granite of Victoria to the granite heads of Northern Tasmania. The intermediate space is the depression of valleys beneath the waters, leaving elevated points as surf-stormed islets now.

A change had passed indeed over the South; not alone when Ichthyosauri and Plesiosauri played in the waters of Queensland and New Zealand, but when the huge Diprotodon and Nototherium sported alike in Victoria, New South Wales, and North Australia, the devil of Tasmania hunted at nightfall for its prey in New Holland, and the nocturnal tiger of the island found a home in the limestone caves of the interior of New South Wales. Among the more recent changes observed along the coast may be mentioned a few. Shells retaining their colour are now seen eighty feet above the sea-level of Jurien Bay. When Flinders was off South Australia in 1802, he noticed a reef in Rivoli Bay seven miles long: it is now fourteen. Lacepede Bay has lost nearly one-half its depth since the French expedition sounded its waters. Port Phillip Bay is even rapidly rising.

Such a continent may have sunk gradually through the space of thousands of years, or it may have been more rapidly engulfed. It is not alone to the girth of volcanic fires on its northern and north-eastern sides that one must look for a cause of such disturbance. There are evidences of wonderful eruptive power to the southward. Mount Erebus, with its cone, 12,000 feet above the sea, on fire, is doubtless but one of many points that aided in this prodigious effort of destruction. The comparatively recent and majestic rise of the Himalayas—carrying tropical vales to the seat of eternal snows, replacing palm-groves with arctic lichens, and establishing a continent in cloudland—could not fail, by the law of compensation, to depress a corresponding region.

The subsidence of so great a territory, however prolonged in its gurgling throes, may have been connected with the isolation of New Zealand and Tasmania from Australia. But, as else-

where seen, there would be elevations even at no remote distance from the chief seat of depression. South Australia and the western part of Victoria may then have emerged with the new calcareous robe so long preparing at the bottom of a warm and tranquil sea. That vast waves of furious might passed over portions of Australia in more modern periods the geologist well knows. The extensive denudations about Hobart Town, the removal of an arch of three hundred miles in Victoria, the torrents which left the flat-topped mountains of Australia to mark the old land-level, alike point to this active agency.

HAVING attempted to show the former connexion of the several present known retreats of the dark peoples of the East, I am brought to the consideration of the next question—the source of this migration—the ancestry of so widely spread a family.

All the facts previously unfolded lead to the strong supposition of the former existence of a great southern continent. Traditions of the Atlantidæ, the Peris, and the Dives—the ancient Persian stories of the lost people beyond the ocean—the mythological fall of Phaeton into the southern constellation of the Po—would point to changes of a geological character. Some might attach the vast spread of traditionary lore respecting the Deluge to this source. There was the evident feeling, that beyond and across the ocean man had some lost associations. Hesiod sang of old: "Night gave birth to the Hesperides, who watch the golden apples beyond the ocean."

As may have been previously seen, traditions of races about and around the Indian Ocean distinctly point to ancient land to the southward. Ptolemy spoke of it two thousand years ago. As we now discover that famous geographer was correct about the sources of the Nile, we may presume his knowledge of the southern extension of Asia is equally reliable. Professor Owen, on ethnological and geological grounds, believed the theory necessary and reasonable. Mr. Murray, the zoologist, has testified to this opinion of former land extension. The comparatively recent existence of the gigantic æpyornis of Madagascar, the dinornis of New Zealand, and a similar ornithological wonder in Queensland of Australia, as described by Mr. Gerard Kreeft of Sydney, would imply the presence of vast connected plains, or indicate a southern centre whence these creatures migrated.

But the botanical argument is the most satisfactory. Dr. Hooker not only showed the analogy of the flora of New Zealand and Australia, and of Tasmania with both, but tracked the plants onward to their primitive home. His conclusions all run the road described in the language of Dr. Owen about the Andaman Isles—"belonging to a former continent that had almost disappeared." The learned naturalist ascertained that while one-sixth of the plants of South-eastern Australia were common to some other place or places, only one-tenth of South-western were abroad. Out of 3,600 species, not less than 1,100 were absent in the south-eastern portion of the same continent. Further, there are twice the number of peculiar genera in the south-west that there are in the south-east.

What is the deduction from these observed facts? Not only that the flora was "developed in a much larger area than it now occupies," demanding an extension of land where now the water rolls, but, adds Dr. Hooker, "*the antecedents of the peculiar Australian flora may have inhabited an area to the westward of the present Australian continent.*"

This great southern continent, formerly extending to Western Australia, to Madagascar, to Andaman, and Ceylon, was at once the parent home of the flora, as it was of the human races, resting in fragmentary remains upon its margin.

While the superstitious practices of the Tasmanians plainly connect them with the Australians, and these again with the Hill-men of India and other countries, some knowledge of their relative place in chronology may be obtained by an inspection of their weapons. While stone axes were wielded and wooden spears hurled, no bows and arrows were used, for no flint heads of arrows have been discovered. When they left the main body of the southern people, man had evidently not so far advanced as to have invented the bow; for no nation would be likely to forget the manufacture of so useful an instrument in the chase. The parent race had then, apparently, no knowledge of agriculture, or even the care of stock. Had the Tasmanians ever experienced the advantages of a herd, they would not, in all probability, have neglected a pastoral life.

Perhaps some light upon the nature of the country from which they came is seen in their employment of small fires. This was thought extraordinary in both Tasmania and Australia,

when their countries so abounded in timber. In spite of this, they always confined themselves to little fires, and each family had its hearth to itself. Was the region from which they came a colder one, one of less forests, or even a vast plain? Did the primitive race from whom they separated roam in scattered families, and, after ages of isolation, eventually become gregarious? As the Aborigines have never, to all appearance, advanced in other ideas and acts, it is reasonable to suppose that their habits, in connexion with fire-making, were those of the original inhabitants.

The part of Australia first settled by the Blacks was to the north, according to Mr. Moorhouse, for linguistic reasons. Mr. Eyre thought they came to the north-west corner, and thence spread themselves in three divisions. The Rev. W. Ridley fancied the north-east angle was the parent settlement, as that part is still called "the little country," from a supposed ignorance of other parts of the continent. Dr. Seemann, who calls Australia "a country in its senility," esteems the inhabitants "the oldest as well as the lowest race of men." Mr. Oldfield fancies, from the pictures Captain Grey found in the cave to the north-west, that "some more civilized people has been destroyed by the Black race." The freshness of the colours, and the peculiarities of the dresses, would rather indicate the chance visit of an Asiatic company. The long garments and the head-gear bear anything but an ancient aboriginal aspect. As no other remains are found, either in the shape of works of art or customs, to express the foreign element, it is reasonable to conclude that no settlement was made by the callers. A shipwreck may have brought them thither.

There are not wanting proofs of the presence of an ancient Tasmanian type on the mainland. On Crocker Island of Raffles Bay, North Australia, Mr. Earl observed the following physical features: "Small in stature, ill-formed, and their countenances are forbidding and disagreeable. The hair is generally coarse and bushy. The beards and whiskers of the men are thick and curly; while the entire body is often covered with short, crisp hair, which about the breasts and shoulders is sometimes so thick as to conceal the skin." The latter part, especially, applies to the people of Van Diemen's Land. Treating of the Coburg Peninsula, to the north-west, Mr. Earl remarks: "The aboriginal

inhabitants of this part of Australia very closely resembled the Papuans of New Guinea, or, which is almost the same thing, the Aborigines of Van Diemen's Land." That Mr. Jardine should find a similar tribe amidst the densely scrubby, mountainous fastnesses of York Peninsula may not surprise some so much, because of the neighbourhood of New Guinea. But a third evidence of the old blood would help to confirm the impression of a more extended spread of the Tasmanian type in New Holland formerly. Mr. Oldfield describes the race as still showing through the Australian in a part of Western Australia. "The tribes inhabiting the country from Murchison River to Sharks' Bay," says he, "possess more of the characteristics of the Negro family than the Aborigines of any part of Australia." And as the two races can be seen in New Zealand, so is there in various parts of New Holland the evidence of a mixture with a more strictly Papuan or Tasmanian type of face and hair.

Were the Tasmanians, then, upon the continent of New Holland before, after, or at the same time as, the Australians proper?

That they both came originally from the same centre, the site of the sunken continent, would seem to have been established. That they separated from the main body, whatever that may have been, under similar circumstances, and approximately about the same period, would appear from their remarkable identity of usages and habits. That they once dwelt under similar circumstances might be likely from their continued family groupings around their little fires. Whether their physical difference, especially in hair, arose from some peculiar and far remote developed principle of selection, we have no means of knowing. When one race was confined to an island, and left without communication with the other, it is easy to conceive of the perpetuation of its own physical peculiarities, and the widening of the physical breach between them. But as Tasmania and Australia were joined at the time of the migration of both peoples eastward, there was nothing to prevent either ranging over both places, or the two dwelling simultaneously in one or both regions. As the Tasmanian characteristics still linger about portions of the New Holland continent,—as it was only natural to suppose they would do, when the Papuan lands of New Guinea and New Caledonia joined it on the one side, and the crisp-haired home of Van

Diemen's Land on the other—there is no doubt that these people ranged, at least, round the coasts of the continent, the highway then between what we recognise now as distant islands.

The Australians proper are now confined between the two great seats of the so-called Tasmanian race. It is but natural to suppose that, in their emigration from the westward and south-westward, they would have established themselves directly upon the south-western part of New Holland—the oldest portion of that continent. At that time, probably, a sea more or less divided Eastern from Western Australia. The travels of the people would, therefore, extend northward and eastward, until ultimately they spread over what is now the continent.

As there are no evidences of their race dwelling in New Zealand, New Guinea, or in New Caledonia, it is much to be doubted whether their advent in their Australian home was not *after* the separation of those islands. In the same way, it may be that they came *after* Tasmania became disconnected. It was not at all probable that they would allow the other, the Tasmanian, tribes to dwell beside them. If they met, it was in war. More recently mixing with other and more advanced nations, and so better provided with the means of offence and defence, the new-coming Australian would quickly get rid of the sparsely-scattered settlements of the woolly-haired race. Cut off from their brethren to the north, the east, the south, they doubtless filled the ovens of the more enterprising Australians, who would soon reign also in the gum-forests of the continent.

The fact of the crisp-haired Papuans being found in islands all round the New Holland coasts, and over so vast an extent of space, ought certainly to indicate their prior migration to that of the Australians. It might be asked how a smaller intrusive party could extirpate them from the whole continent. To this I reply, It is not certain that they were then extensively spread over that region, and an attack might have caused their destruction without difficulty; especially as the contest must have been prolonged during thousands of years, and even until the present time, judging by the remnants now to be detected in isolated retreats of Australia.

That these Papuans are not found in Borneo and Java is not because they found no inaccessible asylums there from the assaults of stronger foes, but, in all probability, because those

islands were not connected with the lands of the old continent at the period of the great dispersion, and therefore not settled by the wanderers; for both flora and fauna in Borneo and Java exhibit so much of the more modern Indian type, as to testify to their recent existence compared with those of the more regular haunts of the Papuan family.

The Tasmanians were in their hunting-grounds when their land was joined to New Zealand on the east and Victoria on the north, whatever there lay to the southward and westward. They were, therefore, *an older race than the Australians.*

They travelled from the former existing continent when the Hottentots and Virzimbers may have been stretching towards South Africa, and when the Andamaners and curly-haired tribes of Malaya and India were reaching their present abodes. They passed on gradually in groups of families, burthened with no household stuff, encumbered with no worldly goods, camping near water, feasting on what Nature provided, and raising a rude breakwind for the night's shelter. They went not forth as bloodthirsty conquerors; they sought no accession of territory, they contemplated no future dominion. They rambled on without object or aim. They pursued the game over tenantless pastures, and they traversed kingdoms owning no lords. Some straggled toward what is now the north-western part of Australia, and so spread over the equatorial region. Another branch by slow movement followed, perhaps, the latitude of Van Diemen's Land, left deposits of life in the forests by the way, and pressed onward to New Zealand, to the Chatham Isles, and to more distant points which have since been swallowed up by the swelling ocean.

They paused only when the sea threw up its barrier, and sent them onward again in curved returning routes. It is doubtful whether these restless men of the wilderness ceased their migration until the great convulsion began to affect the land they trod upon. Their contemplated return to any spot would be checked by the steadily advancing waters. Highways of tribes were covered by eddying currents. Forests were entombed in the waves. Hills sank to ocean-beds. Many of the families discovered their ramblings stayed by the isolation of island life. How vast the numbers perishing in the floods, or hungered to death in wastes, cut off by

rushing straits from fields of game, such pre-historic times can never tell.

With such disconnexion from their fellows, with such circumscribed sphere for development, with such a long night of barbaric darkness, the wonder is that the Tasmanians retained the speech and form of man, and had the strength of human thought, the power of human love.

If, as some philosophers have thought, that lost southern continent flourished when most of Europe, Asia, and Northern Africa knew only the sound of roaring waves, and not the voice of man,—and if, as has been assumed, the Tasmanians came from that now forgotten land, how ancient was the race!

I do not say, or imply, that the Tasmanians were the first people God made; but they may have been so, as far as we moderns perceive. No race presents itself to us of a greater relative antiquity. They lived throughout all history. In their Eucalypti retreats, they dreamed on as a people while the pyramids were reared, while Chinese struggled for a home in the Flowery Land, while the rudest huts of Nimrod rose by the Euphrates, while the ancestors of Pericles ate their acorn suppers, and alike during the infant weakness and maturer glories of old Rome.

But the sweet fern-tree vales of Tasmania echo no more the laughter of the tribes. In ages to come they may be forgotten, and another curious population be recognised as the beginning of the Great One's mighty handiwork. But who can tell, amidst that gloomy night of the past, how many shades of nations—forming ethnological depths answering to the successive telescopic depths of the heavens around us—may thus have glided from the earth!

A SKETCH OF THE GEOLOGY OF TASMANIA.

WHO that has been to Tasmania has not been charmed with its beautiful scenery, its healthful breezes, and its hospitable people? Unlike Australia, the Isle of Beauty has plenty of water in the landscape. Many a stream there has a voice which

> "Is loud and hoarse: his cataracts uplift
> Their roarings to the woods; but oh! how sweet
> The music of his gentle tones, for he
> Has tones of touching sweetness."

There is no such country for rambling lovers. The flowers are so numerous, so varied, so pleasing, as to afford material for a new floral language. The hills are either wildly romantic, with crags for clambering plants, or softly reposing amidst the foliage as if courting the pilgrim's feet. The sparkling waters, as they slyly peep through the tangled scrub in the glens, would provoke a smile from the gloomiest one. In very truth it may be said that there

> "All nature laughs, the groves are fresh and fair,
> The sun's mild lustre warms the vital air."

Above all things, a stroll down a fern-tree vale has wonderful attractions for the lover of nature. When the time shall come that Australia can boast, like Britain, of having a "leisure class," Tasmania will be the place of resort for those who court a delicious summer clime, with such admirable opportunities for the study of rocks and plants. Already Sydney and Melbourne gentlemen, having a scientific taste, have gone over there for their holidays with hammering intent.

In this sense, at any rate, the geology of Tasmania does the country good service. The island will continue to attract visitors

from the heated plains of Australia, by charming them with cool, sequestered glens, and a pleasingly diversified landscape.

Commercially, be it said, the geology does not pay as in the colonies around. The gold, the copper, the coal are there; but the quantity yielded will not satisfy the claims of the capitalist, nor the desires of the workman. The iron may one day be valuable. But no neighbour can compete with the island in the beauty and durability of its building stone. The sandstone, around Hobart Town particularly, has a purity of colour and a freedom of working, that cause an extensive export to the ports beyond the Straits.

It would not be possible in a brief sketch of the geology of Tasmania to give an adequate description of the physical features of the country.

It is essentially a land of the mountain and the flood. Although distinct chains can be determined, yet the general appearance is a confusion of hills and valleys. The climate is affected by such a physical geography. Prevailing westerly breezes deluge the western part of the island, while obstructing tiers prevent sufficient rain visiting the other side. While some places can have 80 to 100 inches a year, the showers of Hobart Town bring but 18 to 20, because of the Wellington ranges. The eastern coast has seldom more rain than is had by the dry valley of the Murray, in Australia, while it is *said* that 120 inches have fallen on the heights at Macquarie Harbour.

A few extracts from the work of the eloquent Count Strzelecki will strikingly exhibit some physical features:—

"A glance from Dry's Bluff," he tells us, "embraces all the beautiful sinuosities of the valley of the Tamar, with Ben Lomond, Ben Nevis, Mount Barrow, and Mount Arthur in the background; also those of the valley of the Meander, as far as the north coast; and the table-land of the south, with the expanded waters of Great Lake; its vast, verdant, marshy plains, stripped of timber, plentifully intersected by rivers and plains, and here and there broken with ravines and elevations. Throughout the whole distance from St. Peter's Pass to Western Bluff the chain averages 3,500 feet in height, and exhibits a greenstone crest of an extremely irregular aspect. That crest is almost everywhere craggy, fractured, and denuded of vegetation its spurs steep and tortuous in their course, and angular and

fantastic; and its innumerable ravines, invariably deep and dry, are strewed with masses of rock of immense dimensions. The character which the dividing range displays to the southward of Western Bluff is still bolder; its spurs in the vicinity of Lake St. Clair, to the north, north-west, and west, are tipped for the most part by more lofty, bare, and cloven summits of quartz rock and sienite, and are divided by darker gullies, the beds of which, furrowed by the torrents in yet deeper trenches, are at times impassable."

Speaking of the endless ridges of the ranges forming mountain network, he says: "At times the eye can seize upon their distinct and independent courses, radiating from a common centre, and gradually sloping into flat-bottomed valleys; at times their flanks are erect and perpendicular, imparting to the ridges an appearance of having been rent asunder, and presenting between dark chasms and gorges, from which roaring torrents make their escape. From no point is the grandeur and infinite diversity of this mountain scenery better viewed than from the lofty, craggy, and precipitate battlements of Ben Lomond."

The PRIMARY ROCKS assume the greatest importance in so mountainous a country as Tasmania. A glance at the map will exhibit the distribution of such elevations.

As yet there has not been sufficient examination of the country, to determine in any satisfactory manner the relative age of the rocks composing the primary order. A rough classification has sometimes been used of "upper and lower palæozoic;" but until the island has been geologically surveyed, we cannot safely indicate the boundary. Apparently the series occur much as they do elsewhere, consisting of limestones, sandstones, claystones, conglomerates, silicious slates, &c. Although very considerable denudations have taken place since their deposition, especially in the valley of the Tamar, yet there is nothing like the wholesale stripping of a vast formation, like that of the upper silurian in Central Victoria, where the arch has been swept away, leaving the two distant piers—the one near Mount Useful, of the Alps, and the other in the Western Grampians—to mark the terrible cataclysm. Cases, however, occur where, as at Avoca, solitary blocks of the original bed remain upon the vertical slates of the valley. A more striking illustration is given a little way from that. High up on the south-east flank

of greenstone-crowned Ben Lomond, a mass of horizontal sandstone is to be seen quietly resting on the almost perpendicularly-pointed rock. It is the interesting memorial of a past deluge, that carried off a vast extent of silurian stone, which once filled up the vale.

On the northern side, between the Tamar and Fingal, the upper palæozoic is mostly limestone, and rests either on the granite or the tilted sandstone lower series. The Tamar Valley has cut through the lower silurian. The upper runs in a long narrow slip through Fingal, round Mount Nicholas, southward to Long Point. The lower is seen north of Nicholas, and meets the granite at the sea by Falmouth. The upper of the Tamar and Piper's Rivers consists of sandstone, clay, conglomerate, and grit. There is an ancient limestone, which may be Cambrian, passing under the silurian of the Don, the Gordon, and the Florentine Valley. It is extensive in area, and good in quality. The upper series takes a course under the Tamar tertiaries to Bass's Straits. The lower, in its neighbourhood, has longitudinal beds of limestone. They appear, also, south of the Blue Peaked Hill. The order of the descending lower silurian is as follows:—clayslate and reddish sandstone, limestone, claystone, foliated clayslate, contorted clayslate, grit, clayslate, limestone, clayslate, and sandstone, grit, quartzose-sandstone, grit, quartzose-sandstone, conglomerate, &c. The conglomerates of the lower consist of white quartz. Conglomerates are the lowest of the upper series. The lower form the west of the Eldon range and the Collingwood Valley, and are of sandstones and claystones. Mudstones often form the base of the carboniferous system.

The absolute thickness of the whole has not been ascertained. In Victoria the silurian beds are reputed to be above thirty thousand feet in depth.

The Limestone, which is so uncommon among the silurian beds of Victoria, is in great force in Tasmania: consequently, the latter country has supplied the former with lime for building purposes. The Tamar district is rich in both blue and white limestones; the latter being crystalline, even to marble, and having a thickness of 140 feet, which is less, however, than that of the blue sort. Tufaceous deposits of lime are frequently met with. Westward of the Tamar, along the north coast, the formation is extended. Near Deloraine it is abundant. A river

passing through it is called the Mole, from its running so frequently underground through the limestone cavities. Holes, like funnels, are known with a depth of 200 feet, often opening into large caverns, with the rush of water beneath. This rock extends from the Mole-side river to the Mersey. The whole country appears to one remarkably like that of Mount Gambier in South Australia. The lovely Vale of Belvoir, near Middlesex Plains, owes its luxuriance of vegetation to the limestone. Around the valley are romantic piles of basaltic rocks. About fifteen miles from Deloraine are limestone caves, of great stalactitic beauty, which have been penetrated to a depth of nearly two miles. The entrance is sixty feet by thirty feet. The Don limestone is beneath the coal. Marble is taken from near Circular Head.

The east side is not equally favoured with the north, though not denied the presence of the rock. At Prosser's Plains, Break o' Day Plains, St. Paul's Dome, Avoca, the Thumbs, and Maria Island it is known. Toward the centre it is perceived at Bothwell, the Eastern Marshes, the Jordan Valley, and Broadmarsh.

In the south it is to be recognised at Impression Bay of Tasman's Peninsula, the Eagle Hawk Neck, the lower Jordan, Mount Dromedary, and around Hobart Town, especially on one side of Mount Wellington. Westward it reappears at Denison range, the source of the Nive, the Florentine Valley, Macquarie Harbour, and for fifty miles along the western river Gordon.

The old Sandstones are more widely spread than even the limestones, and differ much in their lithological character. Some of them down in the south, as that of Mount Wellington, 1,000 feet in thickness, resting upon claystones, have been regarded by some geologists as allied to the new red sandstone of England. The singular sandstone of Rose Garland, River Derwent, in which masses of greenstone a yard in length have been found imbedded, would, also, be esteemed as non-palæozoic. Opposite to Hobart Town is the celebrated Kangaroo Point freestone. Somewhat similar building material is got in the wattle-perfumed valley of Bagdad, on the Constitution Hill, and in Greenponds, where the stratum is horizontal. The Ross freestone is very fine. The sandstone rises 3,000 feet up Mount Wellington. The Grass Tree Hill bed, evidently more recent than the rest, a dozen miles north-east of Hobart Town, is 1,000 feet thick.

From Emu Bay to Cape Grim the formation is horizontal, as it is east of Mount Olympus and near Macquarie Harbour. The Hobart Town sandstone dips more than 30° below the greenstone; at Knocklofty, on the east side, it forms a steep escarpment. That stone has ripple marks to exhibit in Davey Street in the town, but is almost barren of fossils from supposed percolation; the shells are recognised in the mudstones and limestones beneath. Silurian sandstone forms the base of the Western Tiers. Horizontal sandstones lean against the greenstone of Port Arthur. Quite a silurian island stands out in a sea of basalt at Spring Vale, Swanport. There is a sandstone reef off King's Island.

Conglomerates run under limestone at the Thumbs and at Denison range, and rise at a high angle from an anticlinal axis, running north and south at Mount Owen of King's River, to the westward. They form the summit of Dial range, and, in a coarse kind, constitute the head of the Leven River. They often pass into breccias. At Ilfracombe, the Mersey, the Tamar, the Esk Valley, and west of Emu Bay the rock is common. It has been thrown nearly up to the summit of Mount Wellington. In some places it assumes the form of angular quartz in claystone, as though carried along on seaweed. Quartzose grits with corals are at Penguin Creek to the north-west, and much resemble those of Ilfracombe.

The Slates are, as in other places, of every conceivable variety, as being most subject to metamorphic action. Excellent roofing slate is brought from a hill three miles west of the Rubicon, and from York Town. Clayslate simple is the most common. It forms a great part of the dividing ranges. It prevails at the banks of the Scamander, Mount Humboldt, Cape Grim, Dial range, Asbestus range, St. Paul's Dome, the Nive, Port Davey, the Franklin, Tasman's Point, Hibbs, the mouth of the Don, the Rubicon, the Latrobe, New Norfolk, Mount Wellington, and the Huon. It is under the coal of Schouten, under the freestone of Bridgewater, near Launceston, from Circular Head to the Mersey, and between Ben Nevis and Ben Lomond. The mudstones of the Huon contain fragments of slate and granite. The minute holes in some slates are owing to the decomposition of the chiastolites or other crystals.

The GRANITE appears in the greatest quantity along the

north-east coast, and on the Straits' Islands, and in Forrestier's Peninsula. It extends from Falmouth to Paganini Point, and back to the greenstone-capped Mount Nicholas and the lofty Ben Lomond. St. Patrick's Head is rendered defiant by it; Avoca, the meeting of waters, is favoured with it; and the east side of Schouten's is fortified by it. It does not approach Hobart Town, and is not observed strongly to the west of Launceston. It is boldly shown, however, to the north-east of the northern capital. On the west side of the island it forms the buttresses of the Frenchman's Cap, Mount Picton, the Eldon range, and Mount Humboldt. The west coast is generally more metamorphic than granitic. As porphyry, the rock comes forth on the north coast at the Forth, Ben Nevis, Forrestier's Peninsula, and the Eldon range; as glandular granite, in Flinders Island and Cape Portland; as sienite, in the Straits, St. Patrick's Head, Forrestier's Peninsula, St. George's River, the Nive, the Forrester, Eddystone Point, St. Helen's Point, and Mount Humboldt; as eurite, on the St. George, at Mount Cameron, at Ben Nevis, and in the Hampshire Hills. Serpentine is found to the west, and near the Asbestus range. Thin veins of asbestus are discovered in the serpentine, not far from the Asbestus range. Gneiss appears in Florentine Valley. Granite is on three sides of St. Patrick's Head. Schorl abounds in Flinders Island. The Cradle Mountain is of quartz chiefly. The Gordon rushes through a quartz gorge 600 feet in depth. Quartz, also, is developed on the western Hellyer and King rivers, and the neighbourhood of Macquarie Harbour. Quartzose porphyry occurs between granite and gneiss at Mount Cameron, at St. Patrick's Head, and on the Forth.

The metamorphic is believed to be as strongly manifested in Tasmania as in Victoria and New South Wales. Several instances occur of the so-called tesselated pavement. The finest is that on Eagle Hawk Neck, between Tasman's Peninsula and Forrestier's, where the silicious clayslate assumes the geometrical parallelism. The proximity of intrusive rocks, as the porphyry near the fine *pavement* of Port Jackson, marks the apparent cause of the change. At Cape Grim a splendid whetstone, like Turkey-stone, is obtained in the chlorite schist. The Asbestus range, west of the Tamar (which contains no asbestus), is in a transition state. The hills contain dark slates, thick,

bedded grits, quartz veins, and dark mica schists. Talcose slate forms the head of the eastern Scamander. The quartzose conglomerate of the Don passes into jasper. Micaceous slates are covered by the greenstone of Kentish Plains. Mica schist and quartzose compounds are more commonly found to the westward, as at Mount Arrowsmith, the Peak of Teneriffe, Mount Picton, &c. They are often much contorted, and perfectly metamorphosed. Porphyritic slate is presented at Oyster Cove, the Huon, and the Forth; and mica slate at Port Sorell and the Esk Valley. Hornblendic granite passes into micaceous in St. Mary's Pass. The Frenchman's Cap is formed of contending slate and granite, with the various transformations of the two; the top is of quartz. Mount Gell and Mount Horror are of talcose slate, Mount Hugel and Mount La Pérouse of metamorphic slate, the Sisters of quartzose slate, and the country from Wellington Head of Macquarie Harbour to the coast is of all varieties of quartzites. In the interior, from Port Davey to the Lake country, the country is strongly metamorphic; while northward from Port Davey, along the Tasmanian stormy west coast, the exhibition of quartz is so predominant as to give the rocks a whitish look to the passing mariner.

A slight notice of the granitic islands of Bass's Straits must suffice. These form, as it were, stepping-stones from the granitic and metamorphic rocks of Tasmania to a similar geology of South-east Victoria. Raised beaches of four hundred feet indicate past changes. But the evident impression upon the mind is that of the depression of the land between the two colonies. Tertiary deposits are not wanting on some islands; and in such deposits, on Preservation Island, petrified trees with roots and branches have been found.

In the granite of Flinders Island fine veins of porphyry, serpentine, and quartz are found, with crystals, called diamonds. On the west side are raised beaches. Every kind of metamorphic rock is to be seen on the isle. One of its peaks rises 2,550 feet. Curtis was called the "Slippers" by the sealers. The Devil's Tower is a noble mass of granite 350 feet high. Clarke's Island, with its two rounded summits, is 690 feet. The treeless Barren Isle is 2,300 feet. Goose Isle has the appearance of a shoe. The Crocodile Rock and the Rodonto are fine granitic islets. In Kent's group the granite assumes most romantic

shapes; on Deal a bed of calcareous limestone rests between two knobs of granite. The three Hummock Isles and Hunter's Isle are of the same rock.

The volcanic element is not absent in the Straits. Vesicular lava rests on the granite of Erith Isle. A stony head, 300 feet, rises near Waterhouse Isle. Basalt is in great strength on King's Island, flowing over schist and granite, and running out as a formidable reef. Green Island by Flinders, as well as Swan Isle, exhibits the trappean rock.

Tasmania is rich in coal; and yet, commercially speaking, the working of the mines has not proved remunerative. The coal-fields of New South Wales yield so fine a quality, and the mineral is so easy of access, that competition is useless. Victoria is the best market for coal, and would readily buy of Tasmania if the supply could be furnished at equal rate.

Anthracitic, earthy coal is easier of approach than the bituminous, but is not worth the carriage across to Melbourne. When the Port Arthur mines were in full work by the convicts, I purchased my anthracitic, splintery coal in Hobart Town at eight shillings a ton. A similar mineral is procurable at Richmond, Brighton, New Town, Southport, &c. That of New Town, near Hobart Town, is called mesozoic by Mr. Wintle. The bituminous shale is exposed on the north side of Hobart Town.

The chief localities for the bituminous coal lie in the valley of the Jordan, the middle of the east coast, the north-east interior, and the north-west coast.

The Jerusalem coal, though varied in localities, has this reputed analysis: carbon 72, hydrogen 14, oxygen 4, nitrogen 9. It is not abundant in quantity, and was worked for a time with much difficulty from the presence of the volcanic greenstone, which intercepts the veins in all directions.

The central and western portions of the island may be said to be without this useful substance. A little lignite, however, is seen in a tertiary of Macquarie Harbour, and a seam near Marlborough. At Hamilton, by the junction of the Clyde with the Derwent, a good bituminous coal of fair thickness exists; but bad roads render it unapproachable for profit. The opening up of that fertile central country is very desirable. Southward, on the shores of D'Entrecasteaux Channel, the mineral again crops

out. Vast piles of silurian and igneous rocks cut it off from the rest of the field. The Channel itself has torn asunder the carboniferous beds of Adventure Bay, Bruni Island, from the deposits on the shore of the main island. The Storm Bay has burst in, amidst tremendous volcanic throes, and broken out the coal measures once passing from Bruni to Tasman's Peninsula. The Channel coal is often too sulphurous for family use. The Research Bay seams yield 75 parts of carbon, 14 hydrogen, 5 oxygen, and 6 nitrogen. The Port Arthur usually made 80 carbon, 9 hydrogen, 2 oxygen, and 9 nitrogen. Words cannot picture the crime and woe associated with the working of the Port Arthur mine. Inadequate provisions, severe castigations for trifling offences, the tyranny of overseers, the hopelessness of labour, and association with the worst of felons, made the settlement a place of horror.

The east coast, north of Forrestier's Peninsula, is a storehouse of coal; although, from the hilly, impracticable character of the country, the carriage of it has hitherto found almost insurmountable obstacles. The coast is bound with granite, and is harbourless. The surf beats wildly upon the rocks, and the frequent bad weather makes even anchorage most hazardous.

Schouten's Island is favoured with the mineral. There is little doubt the formation extended across, as it reappears in Oyster Bay. The coal, as in so many other instances, runs under the greenstone. Dr. Milligan calculated Schouten's contained three millions of tons. Running then up the east coast, we gain the fields of Douglas River, Bicheno, &c.

Douglas River limestone rests on the slate. The coal is excellent. It yields much gas and heat, does not cake, but leaves a white ash. Nothing but the difficulty of getting it to market prevents the coal being a great success. The Bicheno field is about sixteen square miles in extent. The greenstone even there is a sore trial to the miner. Maria Island possesses the mineral. Great quantities of water-worn jet are found thrown upon the east coast.

Passing inward, through granite passes, round basaltic rises, and over sheets of greenstone, the traveller gains the lovely district of Fingal. No part of Fingal's famous land could present greater beauty of landscape, or boast of so incomparable a climate, as the valleys of the south Esk and the Avoca.

Gently swelling hills of basalt, crags of granite, needles of slate, and prisms of greenstone, vary with rough conglomerates, tertiary plains, and quiet nooks of retiring beauty. Here the carboniferous element appears often under romantic circumstances. Driving along, I have seen the coal peeping out in the sides of every watercourse in the valley. But as the rivers are not navigable because of boulders and falls, and the coast is barred by troublesome barriers, the coal miner is shut in with his treasure, as the farmer too often finds he is with his grain.

The Fingal coal is bituminous. Some of it, like that at Killymoon, is pure jet, and highly inflammable. In many parts it is cut into or cut off by the greenstone, under which, doubtless, the carboniferous measures may extend through North-east Tasmania. It was thought by Dr. Milligan that there were two series in Fingal; Mr. Gould concludes this is not the case.

Rising from the valley is the highly picturesque Mount Nicholas, with its cap of greenstone. On its sides crop out seams of coal 1,500 feet above the sea, and having a reputed formation thickness of 900 feet. The measures seem conformable in dip, &c. to the deposits beneath them. Northward, after crossing ranges of silurian and granitic rocks, one arrives at Ben Lomond, whose top rises 5,000 feet. Upon its sides, at an elevation of perhaps 3,000 feet, I came upon the shining black mineral, which possesses much carbon among its constituents. The analyses of three of these varieties of coal are thus given. Mount Nicholas has 57½ of carbon, 4 of hydrogen, 9 of oxygen, 1 of nitrogen, 1 of sulphur, and 27½ of ash. Fingal has 57 carbon, 3½ hydrogen, 7¾ oxygen, 1¼ nitrogen, 1¼ sulphur, and 29 ash. Douglas River coal contains 70½ carbon, 4 hydrogen, 9 oxygen, 1 nitrogen, ¾ sulphur, and 14½ ash.

The northern coal-field is very promising. There is the great advantage of being at no great distance from the coast, and near navigable rivers. The Don, the Leven, the Forth, the Mersey are favoured with bituminous deposits, though full of perplexing *faults*. The Mersey coal extends for eight miles. Mr. Selwyn and Professor M'Coy united in the opinion that the coal-fields of Tasmania were simply oolitic, like those of Victoria, and, consequently, could not be expected to be superior in quality, or considerable in extent. The Rev. W. B. Clarke has no doubt of the *true coal* character of the Hunter River basin of New South

Wales. The presence of palæozoic fossils has declared it. But Mr. Gould, the Tasmanian Government Geologist, contended that in the island there were two periods of formation, and that the Mersey coal is older than that of the Fingal or Douglas River. As he finds the coal penetrated by the greenstone there, he recognises the superior antiquity of the combustible mineral to the flowing trap.

In the Mersey coal-field the dysodile is found. This inflammable shale is a sandy substance full of resinous particles. There is a deposit of 300 feet of conglomerate, claystone, &c. in which the dysodile runs as a bed, from a few inches to a yard in thickness, containing Productæ, Pectens, &c. An area of 400 acres contains the mineral. The resinous dots in the dysodile have received the name of Tasmanite. The expressed oil contains very much sulphur.

The SECONDARY formation was formerly thought quite unrepresented in Australia and Van Diemen's Land.

For a long time this theory was maintained, to exhibit one of the many decided peculiarities of that part of the world. Of late, perhaps, the tendency is to multiply evidences of the existence of this lost series. The discussion between the Rev. W. B. Clarke and Professor M'Coy relative to the age of coal may be mentioned as an instance. The great discovery, by Mr. Carson, of fossils belonging to the cretaceous system near the head of the Flinders River, Queensland, excited much attention. With Ichthyosauri thirty feet long, no doubt of secondary rocks remained.

Belemnites and ammonites were then found on the Fitzroy Downs of Queensland, with triassic forms on the Mantuan Downs, and on the Yaboo. In Western Australia the ammonite and trigonia tell their tale. Specimens have been procured thence like the trias, oolite, and cornbrash of England. There seems a great probability that the secondary formation extends across the continent from Western Australia to Queensland. Mr. C. Moore conjectured the existence of a neocomian deposit, judging from the gigantic crioceras or ram's horn found there. There are, however, some colonial geologists who have lingering doubts about the true development of the European lias and trias in Australia.

New South Wales has similar indications. The Rev. W. B. Clarke's Wianamatta beds of the upper coal series would belong, most probably, to the mesozoic. Oolitic limestone has been pointed out seven miles from Scone, by the valley of the Hunter, according to the authority of Mr. Keene, Inspector of Coal-fields. Saliferous rocks on the Castlereagh seem like the new red sandstone of Europe.

Victoria has the same presentations. Mr. Selwyn classes the coal-beds there away from the primary. A district to the eastward, seventy miles by ten, belongs to the secondary. Mountain limestone is known south-east of Lake Omeo. Bacchus Marsh has a sandstone of the New Red order, which is very valuable to the builder. The unio and zamite indicate the middle age. The oolite was seen by Mr. Selwyn six miles north of Mount Macedon. Ammonites have been dug up at Richmond, a suburb of Melbourne; and there is true chalk in Prahran, another suburb.

Tasmania is not wanting in this development. The coal has been pronounced an oolitic production. Professor M'Coy declares the Hobart Town sandstone to be as truly new red sandstone as the rocks near Liverpool. Mr. Wintle and Dr. Milligan have been equally satisfied upon that subject. The discovery of the labyrinthodon establishes that age for the Hobart Town rocks. The hone beds, reposing on Mount Wellington, six to seven hundred feet in thickness, may belong to that period. The sandstone found at Rose Garden, near the Derwent, may be the same age. Its peculiarity consists in its embrace of huge masses of greenstone. Pieces a yard long and half a yard broad have been noticed enclosed.

One thing is certain enough—that a wonderful denudation took place before the tertiary period all over Australia and Tasmania, tearing and destroying utterly extensive previously-existing beds. The few exhibitions of the secondary are sufficient to point out the fact of its presence down in the south, and the high probability that it may once have covered a great area.

The TERTIARY rocks of Tasmania are generally localized and limited. The valleys of rivers, of course, furnish most of the illustrations. Broad surfaces are seen to the northward. Stretching from the foot of Dry's Bluff to Launceston lie the breccias,

sandstones, limestones, and clays of the tertiary period. Though tilted at a moderate angle, they are pretty conformable in their deposition. A great proportion is of a coarse conglomerate, resting upon clayslate, often highly contorted. Along the northern coast occasional patches of recent rock are observed. An oyster-bed is thrown 120 feet above the beach at Port Sorell. At the Mersey there is a recent gravel. The tertiaries of Dorset county are of sand, clay, and pebbles. A tufaceous limestone crops out at the Tamar heads, and argillaceous material at Launceston. Raised beaches are either tertiary or post-tertiary. One near Cape Grim is 100 feet high. Epping Forest, the home of kangaroos rather than of men, is covered with white rolled quartz, with ferruginous gravel and sand. Objectionable to the farmer, it makes a famous road. I have rattled over a seven-mile stage of it in eighteen minutes, the coachman simply speaking to his four beautiful animals, and letting them have the reins.

The tertiary appears little to the westward. On the east side of Macquarie Harbour lignite with fossil resin may be distinguished. Some modern beds show themselves on the north side. In one part of the course of the rapid Gordon cliffs of recent origin rise eighty feet above the stream, and a ferruginous conglomerate forms the Great Bend. Rolled stones fill up the lowlands south and east of the Harbour. Another collection of pebbles is passed over between the lofty western peaks and the Lake country, and a quartzose conglomerate at the Surrey Hills. Patches of recent sandstones and limestones occur among the Western Tiers.

The eastern side of the island has most of this formation, though much of it is considered pleistocene. Greenstone boulders, some of them six to ten feet in diameter, constitute a portion of this pleistocene drift. Clays are abundant at Point Puer, of Port Arthur. The yellow bluff of North Bruni is an ochre. A very large extent of the tertiary is exhibited in the lower valley of the Derwent. Many of the boulders of volcanic rocks there measure several feet in diameter. Huge rolled stones of primary rocks from the interior were deposited in that recent period.

Around Hobart Town sandy beds containing broken marine shells of existing species are seen one hundred feet above the

river. A fossil oyster-bed at Sorell is at a similar elevation above the water. Freshwater limestone is frequently seen near Hobart Town. At Richmond Mr. Wintle found Diatomaceæ in the encrusted silicious tufa connected with the limestone, exhibiting the action of thermal springs. The igneous rock has considerably affected the travertine deposits of the lower Derwent. Impressions of plants are numerous in the travertine.

Considerable attention having been excited by the evidence of glacial action in the tertiary times of New Zealand, search has been made elsewhere for similar indications. A few appearances have been rather conjectured, than demonstrated, to exist in Australia. Mr. Selwyn told me he had seen nothing of it in Victoria. But Mr. Gould satisfied himself of the existence of a moraine at the end of Cuvier Valley, Western Tasmania. The absence of grooves he attributed to the friable nature of the rock.

The metalliferous wealth of Tasmania is not great. Galena, with a little silver, has been found in several localities to the west of the Peak. Copper in fair percentage is said to be seen in calcspar on the Franklin River of Macquarie Harbour. The limited supply of copper is remarkable, considering the presence of palæozoic limestone, so favourable to the existence of the metal in South Australia and New South Wales, and which is so wanting, generally speaking, among the silurian beds of Victoria.

Iron is more abundant. Besides being a part of the volcanic rock—its presence causing the latter to be commonly known in the colony as *ironstone*—it occurs in a magnetic form at Deloraine; it is well developed on the Leven to the north, as well as in D'Entrecasteaux Channel and the Asbestus Hills. In strings of magnetic oxide it is present in serpentine; and, especially on the northern side, as well as near Bothwell, is observed as hematite. Spherical balls of white pyrites are common in South Bruni Island. Cubes of iron pyrites abound in the schist of Broadmarsh, and at the junction of the Denison and the Huon. As micaceous ore, it is known at Quamby's Bluff; and as specular ore, at Swansea. The titaniferous ironsand of the Channel is plentiful and rich.

But it is at Ilfracombe, West Tamar, that the rich brown hematite extends over a considerable space. It is in real lodes,

one of which contains from fifty to seventy per cent. of iron. Mr. Gould thought one vein had 350,000 tons convenient to hand, being 66 feet wide, and with an outcropping of 300 yards in length. Masses of magnetic iron ore are picked up weighing 30 pounds. There are at Ilfracombe alternate beds of the brown hematite and earthy matter. The wooded hills would supply fuel for the smelting.

Gold, though eagerly sought for by miners under the stimulus of a high Government reward, has not sufficiently rewarded effort in the search. Though discovered in quartz by the Huon, and even Oyster Cove, it is chiefly confined to the metamorphic rocks of the north-east corner. Fingal is still the principal district where operations are being conducted; but, as in South Australia, the precious metal is in such small quantities as to employ but few workers. Mr. Gould found a particle of gold in Tasmanian coal, as Sir R. I. Murchison detected it in the Dudley coal. The Rev. W. B. Clarke had previously known it in the Sydney sandstone which overlies the coal.

In Fingal it is usually noticed in the vertical slates. It has been gathered from the alluvial deposits of Piper's River and the Devil's Den of Dorset. At the base of Mount Arrowsmith, on the side of the Frenchman's Cap, in the metamorphic rocks of St. Mary's Pass, in the quartz of Point Hibbs, and in the mica schist of Port Davey, the bright metal has shown its welcome face. The Rev. W. B. Clarke, who by invitation carefully examined the island for the precious metal, tried to comfort the Tasmanian colonists with the assurance that gold was not wanting there, but was, unfortunately, too frequently in contact with sulphuret of iron, the most difficult and impracticable matrix of the precious metal.

The VOLCANIC rocks of Tasmania are widely spread, if not very varied in character. The island is very different from its Victorian neighbour in this respect. Across the Straits basalt has almost monopolized all the colony south of the diggings' dividing range, but seldom appearing on the northern side of that boundary. Among the Alpine chains trappean veins and floods would of course be expected. Besides this vast, and almost wholly connected, floor of basalt, Victoria possesses, especially toward the south-west, about fifty recognised craters of

eruption, which have discharged not basalt alone, but porous lava, or pumice, and great quantities of volcanic ash. The sides of most of these craters consist of the ash, more or less consolidated. A number of these old outlets are now lakes of water. Scarcely any greenstone, the hornblendic igneous rock, is to be seen.

In Tasmania, on the contrary, the basalt is almost always compact and heavy, scoria being rare. Greenstone, too, is the special volcanic element of the country, and equal to, if not in excess of, that of the ordinary basalt. Ash is said not to be known. Craters, as such, are not recognisable, in spite of the assumption that the five great lakes of the basaltic plateau of the interior were vents in the olden times. Mr. Wintle may be probably right, when speaking of the Wellington basalt, that in most instances the material came welling up from beneath, spread in, around, and upon the rocks, and had no perceptible mouth or crater.

Victoria occupies, in relation to volcanic agency, a middle period of geological history, between Tasmania and the ever-smoking New Zealand. Certainly the latter country has some more ancient basalts than Victoria can present, but it has all the most recent forms of eruptive rocks, with living craters of fire. But Victoria has basaltic plains of greater extent than either of the others can show. South Australia has scarcely any volcanic element out of Mount Gambier district; and New South Wales, away from its ranges, has not very much apparent.

As to the age of Tasmanian eruptions, some judgment may be formed from an inspection of the neighbouring formations. It has been supposed by Count Strzelecki that the first great eruption threw up the ranges extending from St. Patrick's Head to Table Mount, elevating at the same time the Ben Lomond country, that from St. Valentine's Peak to Mount Cameron, and disturbing the slates between Emu Bay and Cape Grim. Mount Wellington and Dry's Bluff are placed at more modern date, when the Jerusalem coal was invaded. The next eruption caused the faults of the coal-field of Port Arthur, and cast up the carboniferous sandstone of the south Esk 2,000 feet above its basin. The last came after the variegated sandstone was deposited, and proceeded from the valley of the Derwent, en-

circling the silicified trees of Macquarie Plains, and developing the wonderful Lake country of the northern interior, where 1,200 square miles of territory were hurled up 4,000 feet. Even Mount Wellington igneous rock is younger than the tilted stone on which it rests, and than the travertine close by.

As geologists cannot define the exact boundary of the eruptive rocks, which meet the sedimentary on the one side in metamorphisms, and the primary granites on the other, the expression "porphyry" in descriptions of country is often puzzling. Count Strzelecki has some interesting remarks upon this subject, when referring to the rocks on the Forth.

"The porphyry," says he, "when propelled from beneath, so convulsed, tore, and shattered the superincumbent rocks, that the crust thus loosened and weakened became as it were a beaten track prepared for the subsequent intrusion of greenstone, basalt, and trachyte. Indeed, the porphyritic injections have given such facilities for the intrusion of other igneous rocks that it is almost always from the vicinity of their eruption that greenstone, basalt, and trachyte appear to have spread, and now cover immense tracts of country."

The trachyte seldom takes the well-developed form of felspathic crystals, as seen in the Drachenfels of the Rhine, and is often not easily to be distinguished from porphyry. The worthy traveller may well add, "There will be found insuperable difficulties in the way of a classification of volcanic products."

Basalt is one form in which the igneous rock appears. The division of that into several distinct varieties is needless, as the same specimen of stone will often exhibit several kinds together. The olivine is a usual accompaniment of basalt. Arragonite is obtained from the basalt of the Leven heads, and analcinne and chabazite are got near Table Cape. Basalt is often found over, under, or alongside of, the greenstone. It runs along one side of Mount Wellington, while the latter shows itself on the southern side. It shares with that the work of separating the waters of the Huon and the Derwent. It is sometimes found containing fragments of other rocks, as in the half-a-mile-wide dyke of Sandy Bay, near Hobart Town. It often poured through rents previously made. Some basalts of the island have been reputed subaerial, though the consolidated nature of the rock would indicate a subaqueous origin generally.

The presence of basalt usually indicates good land. The decomposition of the rock furnishes the rich phosphates so appreciated by the farmer. A curious patch, forming Scott's New Country, south of Ringarooma, and being sixteen miles from north to south, is a wonderful region of fertility. Dorset county is strong in basalt, which there takes the shape of basins and table-lands, and is unaccompanied by its rival, the greenstone. It is assisted by the latter, however, to build up the mighty structure of the Lake country.

Lakes St. Clair, Arthur, Echo, Wood, and Sorell are upon a vast plateau, which is difficult of access, and which in winter is covered with snow. There are several formidable cliffs, rising almost perpendicularly, known as Quamby's Bluff, Miller's Bluff, and Dry's Bluff, on the northern and eastern sides of the plateau. The country to the westward continues to maintain a considerable elevation. Though one of those lakes (St. Clair) is 550 feet deep, there is no proof of its having been a crater, as no ash or scoria is near. The rocks of this wild, impracticable, and inhospitable district are basalt, greenstone, and porphyritic granite, with trachytic compounds.

On the Hobart Town side the basalt is well developed, not only on the northern side of Mount Wellington, disturbing the sedimentary beds, but onward thence northward through Bridgewater, and up the Jordan River through Brighton and Bagdad districts, into Abyssinia, Jericho, Bothwell, Oatlands, Ross, and Campbelltown. The Epping Forest stops the rock; but eastward and westward of the tertiary floor of the Norfolk Plains, the forest, and the country south of Launceston, the igneous reappears. Near the northern capital the basalt forms the falls of the Esk, and much of the west bank of the Tamar, especially between West Arm and Middle Arm. It takes up the country from George Town to Piper's River.

To the westward, the Deloraine country abounds in it, and the Kentish Plains are made fruitful by it. The pudding-shaped Circular Head to the north-west, rising out of the sea to the height of 490 feet, is chiefly of basalt. The farmers in that locality, as well as in the Surrey and Hampshire Hills to the south of it, grow their unequalled potatoes in its black, decomposed soil. Around the Vale of Belvoir, of the Middlesex Plains, the basaltic hills are of such a peculiar appearance, particularly

where the prismatic columns stand out boldly to view, that Dr. Ross compared them to chimney-sweepers on a May-day, and hence called them May Hills. Westward still, the rock is observed at Cape Grim and the Cradle Mountain. It is little known toward the west coast.

To the north it appears as a vein in the granite of King's Island, and rears itself as a dangerous reef outside. Down D'Entrecasteaux Channel it is not so developed as greenstone is, though well known on Bruni Island. It is all-prevailing on Tasman's Peninsula. It is the rock of the place. The lofty columns of Cape Pillar strike with awe the voyager who passes between the iron gates of the Pillar on the one side and the basaltic Tasman's Isle on the other.

While in most places, perhaps, the basaltic floor has sunk beneath the ocean for a more recent deposit, there are others which remained as islands in the surge, and now present scenes of luxuriant vegetation. Districts like those of Brighton, the Mersey, the Hampshire Hills, the Huon, and Cape Portland are the pride of the country, the glory of the farmer. There the rich black soil from surrounding hills of volcanic rock has grown wheat crops, without manure, for over forty years.

The basalt and greenstone form, as in Melbourne, the principal building stone. The abundance of that material has furnished Tasmania with its famous roads. For many years the principal employment of convicts lay in the blasting of these rocks, and the formation of those highways. By their labour was the country opened up. The piercing through this hard stone in the centre of the island, and the toil under cruel taskmasters in the severe climate of that upland region, earned for the passage the name of "Hell's Gates."

The Greenstone of Van Diemen's Land was an object of great interest to the Polish visitor. He classed this diabase or diorite, a compound of hornblende and felspar, under the divisions of slaty, prismatic, and amorphous greenstone. The first has something of the sedimentary appearance, probably from successive overflowings of the heated matter. It is widely distributed, and is very distinct in its horizontal seam-like aspect from the other greenstone with which it is connected. From being found so much alongside of porphyry, the Count was led to believe that this particular sort was erupted or propelled along the pre-

existing side or slope of the consolidated porphyry. When powdered, the stone is of a brownish-yellow colour. The amorphous, yielding a dull sound when struck, and therefore very unlike the musical phonolite, is the most common form. The most attractive appearance of the greenstone is in the prismatic condition, while it is usually of a darker green. The prisms are observed to be three, four, five, six, and seven-sided; perhaps the pentagonal and hexagonal are oftener met with, as in the prismatic basalt. When presenting with its columns the side of the waterfall, it is seen to perfection. Some prisms affect the needle. The diameter of the crystal stones ranges from less than a yard to even three yards. The height to which some columns attain is hundreds of feet.

The south-west side of Mount Wellington gives one of the finest views of this interesting rock. When leaving Hobart Town, the traveller passes over the glittering stone, quarried freely for building purposes. As he ascends, the sandstone comes into sight. Lady Franklin's Platform is of sandstone. It projects, with its horizontal strata, on the side of the vast mountain, and commands one of the most magnificent views of land and water to be obtained in the southern hemisphere. Again and again does the greenstone interrupt the course of other formations. It flowed over the fossiliferous mudstones, it covered the limestones, it ran across the varied sandstones.

But the "Ploughed Field" is the greatest attraction there: over a vast space of many hundreds of acres, and forming a gentle slope on the upper side of Wellington, the greenstone lies in isolated blocks, tumbled on each other, like a collection of dice thrown down by a party of giants. The stones are evidently fragments of prismatic pillars, and have been broken, singularly enough, into masses of from a ton to ten tons each. What could have strewn these ruins about? High above them is reared the wonderful prismatic greenstone escarpment of the mountain, whose columnar face is turned toward the town, and is so attractive an object to the land-sick emigrant. Did that range of columns once extend more to the westward? Was the mountain once larger in the greenstone formation of its summit? Had a terrific convulsion shattered this splendid temple of nature, and hurled down its columns of pride? Or, was it simply by the operation of frost and storms that the destruction was occasioned?

When we survey the extensive denudation of different beds around Hobart Town, leaving isolated platforms as monuments of the past, we may, perhaps, suppose that this extraordinary distribution of greenstone fragments took place at that epoch of deluging power, and just before the slow and majestic elevation of the grand old mountain.

In many respects the geological story of Mount Wellington will apply to Ben Lomond, a thousand feet higher. There, too, the profound and terrible abysses indicate the struggle through which the region passed. In both instances the greenstone forms the cap. Ben Lomond is a table-hill eight miles long at the summit. I found the snow lying there in the height of summer. The prismatic columns on the Fingal side form a noble escarpment, and are surrounded by a talus of the débris of columns. The beautiful greenstone dome of St. Paul's, to the south of Ben Lomond, is reared upon buttresses of granite and silurian limestone. Dr. Milligan thinks the age of Ben Lomond and Ben Nevis greenstone to be subsequent to coal.

Mount Nicholas of Fingal has a most romantic look in its isolated elevation, with a cap of greenstone. The western Eldon range, Cradle Mountain, and Macquarie Harbour hills, are similarly crowned with this hard rock. The non-appearance of the same on neighbouring and lower lands is rather an argument that it formerly did exist over the whole district, but had been denuded and carried off. At that estimate the general level of Tasmania must have been much higher formerly. The thickness of the overflow, amounting sometimes to many hundreds of feet, would seem a difficulty which floods could not surmount, did we not know the operations of nature elsewhere. A greenstone-capped tier rises a thousand feet above the valley of the Tamar, and runs parallel to the river, a few miles back, passing through Direction, Dismal, Tippagory, and George, with many illustrations of vertical columns.

The greenstone is in great variety. In some specimens the felspar is in minute grains; in most the hornblende prevails. Sometimes the colour, instead of green, is blue, or rather dark blue—as at Battery Point, Hobart Town, where the grain is very fine. The southern greenstone has often a cuboidal structure. It forms "stony steps" in the country, as well as "walls." Mount Wellington rock is more felspathic than some green-

stones. The roughness of blocks is owing to the absence of the felspar crystals. The "organ pipes" occur more frequently with the greenstone than with the basalt.

One greenstone range extends from St. Peter's Pass, half-way between Launceston and Hobart Town, up to the Western Bluff, 3,500 feet high. Another passes between the Forth and the Mersey. One connects the Hampshire Hills with Cape Grim, and another with Macquarie Harbour. In connexion with basalt this rock forms considerable elevations, separating the waters of the Huon from the Derwent. This intruder shows itself with the granite at St. Patrick's Head, Cape Portland, and Flinders Island. It cuts off the carboniferous sandstone on one side of Hobart Town from the like formation on the other, and pierces it on Knocklofty. It is pre-eminent in the Lake country, especially south of St. Clair. It has rushed through the limestone of the Mersey, and driven aside the slate at Avoca. In St. Paul's Valley it has pierced the clayslate, and flooded the Prosser's Plains. The Douglas coal, like every other Tasmanian coal-field, has been invaded by this fiery flood, and the western corner of Schouten's still bears the remembrance of the flowing stream.

Hell's Gates of Spring Hill are formed chiefly of greenstone, and the western head of Port Dalrymple is guarded by it. It confronts the southern ocean in the isles to the south, shelters the extremity of Bruni Island, and dares the onset of the waves at Whale Head and the south-western coast. The soft landscape of Lovely Banks is indebted to it, and the Salt Pan Plains extend on it. At the head of the Mersey its precipices are 800 feet deep, and at the river's mouth it mounts as a bluff in prismatic beauty. The Derwent receives its earliest waters from its basins. It reaches Bicheno from the south Esk, covering an area 15 miles long by 15 broad.

The columns of Tasman's Peninsula are of greenstone as well as of basalt. From Torquay to Latrobe, from the Mersey to the Rubicon, from the Forth to the Mersey may the rock be seen. A patch near Mount Nicholas is nine miles long. Mount Manfred and Mount Humboldt are covered by it. The Dromedary bears it, Forrestier's Peninsula is threaded by it, the Eagle Hawk Neck is affected by it. Cape Frederick Hendrick is emboldened by it, and Fluted Cape rendered attractive by it. On the east coast, near Douglas, it presses upon the sandstone,

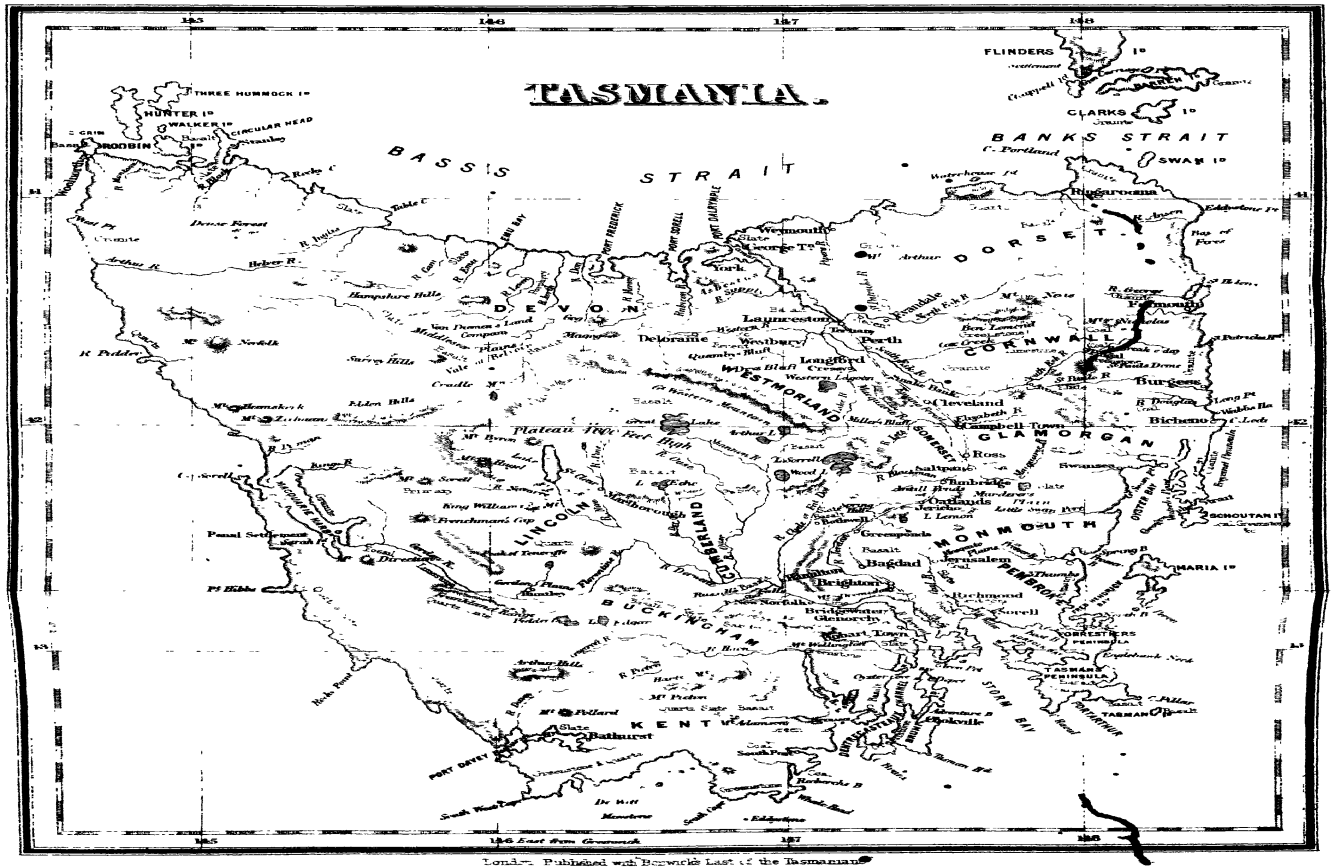
beneath with a burthen of four hundred feet in thickness: Though, comparatively speaking, little developed in the extreme western country, it is the principal material of the so-called Western Tier.

But the limits of this little geological sketch will not permit further reference to this remarkable rock.

The FOSSILS of the older rocks are similar to those of the continent of Australia, and to those of Europe. They vary according as the formation changes in the composition of rock. Perfect fossils are not so common as in Victoria. Around Hobart Town, as well as in many other parts, casts only appear. The most common forms are those of the Spirifer, Productus, Pecten, and Terebratula. I have not heard of the Graptolite, which is well known in the Victorian rocks.

The limestone of the river Nive abounds with Productæ; the shale of Mount Wellington with the Endogenophyllites Wellingtonensis; the shale of Constitution Hill with casts of plants; the fossiliferous claystone of Eagle Hawk Neck, and the carboniferous flagstone of Fingal, with Spirifers; the limestone of Fingal with the lace-coral Fenestella; the purple claystone of Hobart Town with the Phyllotheca; the Caroline Creek and Oyster Cove rock with Trilobites; the Florentine limestone with the fossils of Mount Wellington; the claystone of Brown's River with Pecten; the western interior with crinoidal columns; the carboniferous limestone of Glenorchy with an Orthoceras a foot long; the Spring Hill mountain with the Stenopora, Pterinea, and Pachydomus; the mudstone of the Huon with Serpulæ; the quartzose grit of Penguin Creek, to the north-west, with corals; the Mersey conglomerate with Trilobites; the upper silurian bed of Cape Portland with Fenestellæ; the carboniferous deposit of Maria Island with Productæ and Spirifers; the Mount Wellington sandstone with seaweed and ripple marks; the carbonaceous mudstone of the Huon road, near Mount Wellington, with casts of the Terebratula and Atripa; the shale of New Town with ferns; and the limestone of Macquarie Harbour with Favosites, Orthoceratites, and Murchisonia.

The fossiliferous limestone of the Gordon, westward, is said to be a thousand feet thick. The palæozoic fishes are not known. The fossils of the Eagle Hawk Neck, in Tasman's Peninsula, are


TASMANIA.
BASS STRAIT
BANKS STRAIT
FLINDERS I.
CLARKS I.
SWAN I.
THREE HUMMOCK I.
HUNTER I.
WALKER I.
CIRCULAR HEAD
ROBBIN I.
Port Dalhousie
Port Sorell
Port Frederick
Port Davey
Wernmouth
Stanley
Table C.
Dense Forest
Hampshire Hills
Arthur R.
Leven R.
Emu Bay
Mt. Nelson
Mt. Bischoff
Mt. Cradle
Mt. Zeehan
Mt. Heemskirk
Mt. Perrin
Mt. Rugby
Mt. Sorell
Mt. Pedder
Mt. Olympus
Mt. Ossa
Mt. Barrow
Mt. Pelion
Mt. Pelion East
Mt. Pelion West
Mt. Ida
Mt. Fenton
Mt. Wellington
Mt. Direction
Mt. Dromedary
Mt. Cameron
Mt. Cameron West
Mt. Cameron Range
Mt. Cameron Range
Mt. Cameron Range

like those of Mount Wellington and the sources of the Derwent. The palæozoic fossils are often found greatly disturbed. The Tasmanian coal-fields exhibit the Sphenopteris, the Pecopteris, and the Zeugophyllites. Much of the usual English carboniferous flora is absent in the island. No Calamites, Sigillaria, and Lepidodendrons have been seen, though some, particularly the Glossopteris and the Lepidodendron, are recognised in the coal of New South Wales. A great variety of common tertiary forms have been detected. A rich flora is seen in the travertine of Macquarie Harbour, and near Hobart Town. Dentalia, Turritellæ, and Sponges are in the raised beach of Cape Grim. Fresh-water snails, with many impressions of leaves, abound in limestone slabs near Hobart Town. A fossil vegetable caterpillar has been observed, with other insect forms, in the fresh-water limestone of the lower Derwent. Bones of animals are frequently met with in the gravels and clay. The Casuarina and Banksia of the day have been dug from the tertiaries of Flinders Island.

Although Mr. Gould did good service while the Government geologist, and Mr. Wintle has laboured freely and nobly in the cause of science, yet the fossil discoveries have not been extensive, or even satisfactory. There are still wanting on the little island many forms of life revealed on the continent of Australia.

No gigantic Diprotodon is found; and yet that herbarious monster of the tertiary period has been seen in Western Australia, South Australia, Victoria, New South Wales, and Queensland. The Notatherium is absent. There are no Ichthyosauri, Plesiosauri, Enaliosauri, and Ammonites, as in the secondary formation near the Flinders River of Northern Australia. There are no fossil Monitors, twenty feet in length, as in Queensland. The monster extinct bird is not known in the Tasmanian formations.

The Dingo, or native dog, whose howl is still heard in the night, and whose fossil remains are known in the cave of Mount Macedon, and under the volcanic ash of Warrnambool, in Victoria, has never been noticed in Tasmania. And yet the island Thylacinus, the native tiger, has been recognised as a fossil on the continent; and the Tasmanian devil, the Dasyurus, once hunted nocturnally in the forests of Australia. No dog

barked in the island till the colonists came with their English quadruped.

Kangaroo forms are detected in the bones gathered from caves, especially the bone-cave of Glenorchy, near Hobart Town. And yet Mr. Wintle, the first explorer of that subterranean retreat of the tiger and devil, believes that the kangaroo found in the furthest chamber could never have got through the small entrance at present existing in the greenstone rocks.

But that which especially distinguished the labours of Mr. Wintle and Dr. Milligan was the discovery of a species of huge Batrachian reptile, the Labyrinthodon. This animal has been only seen in triassic formations in Europe. A femur, and two well-preserved legbones, four inches and six inches in length, have been the geological trophies. They were deposited in the Hobart Town Museum of the Royal Society. The rock was sandstone, and the locality was near Hobart Town.

Fossil wood is extensively distributed in Tasmania. In following down the river Derwent for many miles, I have picked up pieces the whole way at short intervals. When *in situ*, they are either enclosed in sedimentary deposits or in igneous rocks. Fossil trees stand perpendicularly, with roots attached, in the Douglas coal. A silicified tree lies across the river Forth, and has been used as a bridge.

The most remarkable specimen, however, is that still to be seen on the Macquarie Plains, nearly forty miles to the west of the capital. At the time I saw it, in 1842, about twelve feet of the upright stem were exposed. It stood in a bed of vesicular lava; while near it, in the river, was a compact sheet of greenstone, belonging to another igneous stream of an earlier age. The tree was coniferous, and unlike any now existing in that part. The bark was of beautiful opal, and different in silicified appearance to that of the successive layers beneath. No bond of union was between the separate fibres, into which the outer layers separated. The ground around was covered with a white powder, like pounce, from the decomposition of the fibres. Count Strzelecki refers to some trees that "withstood the intensity of the incandescent matter; other trees, placed in circumstances less favourable to their previous fossilization, were consumed, but being either saturated with water or still green, they resisted in some measure the process of combustion, and have left behind longi

tudinal moulds in the basaltic scoriæ. Into some of these moulds a second eruptive force appears to have injected fresh lava, thus forming casts of the consumed trees, and records of the succession of volcanic agencies."

The Natural History of Tasmania has attractions exceeding even those of its Geology, presenting many peculiarities of great interest. Altogether, there is no colony of the British Empire which would so reward the student of history, of botany, of zoology, and of mineralogy as the beautiful little Island of Tasmania.